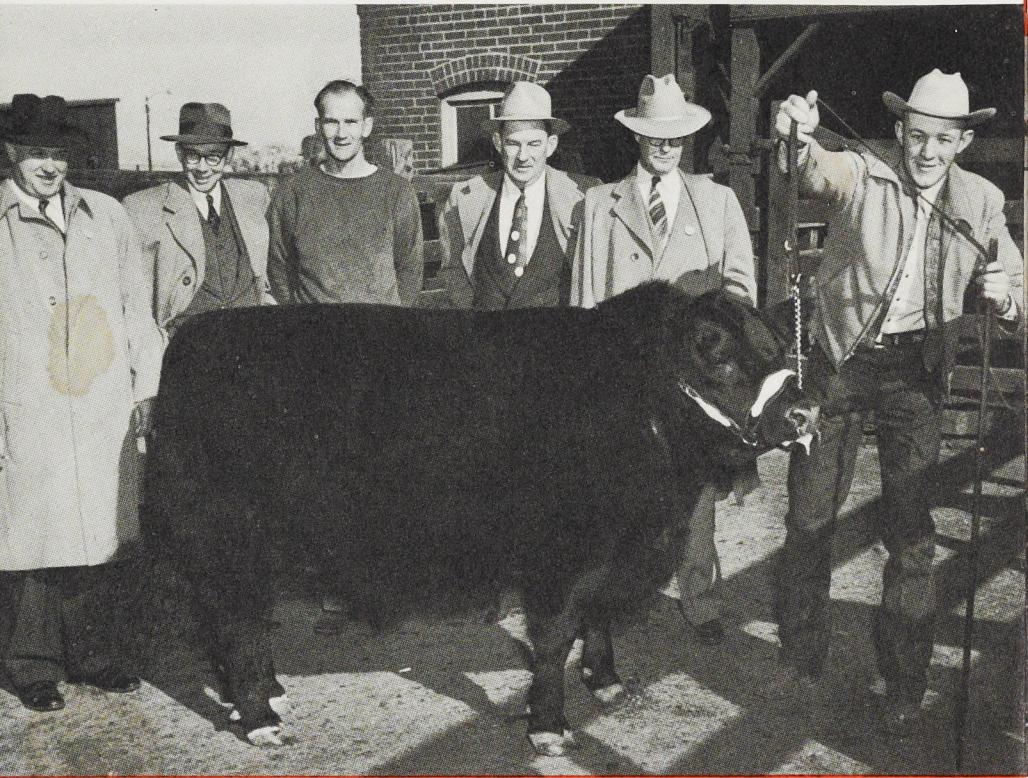


Franklin

VACCINES AND SUPPLIES





Night Watchman, 1950 Grand Champion Steer over all breeds at the 1950 National Western Stock Show, Denver, Don Harkness, Golden, Colorado, at halter, and owner.

FRANKLIN VACCINES, MEDICINALS

INSTRUMENTS, APPLIANCES, AND

SUPPLIES FOR LIVESTOCK.

AMERICA'S LEADING BRAND OF ANIMAL BIOLOGICS

CATALOG No. 51

Practical Helps for Preventing Live Stock Losses

EXPERIENCE has proven that certain practices greatly reduce the risk of loss in handling livestock. In this catalogue is shown a wide variety of products needed in such practices.

Every effort is made to merit the continued confidence and patronage of our many friends in the livestock industry. Our constant aim is to supply dependable products of high standard quality at the lowest consistent prices and with prompt and courteous service.

You may rely implicitly upon any merchandise ordered from our catalogue. If it is not satisfactory, you are at liberty to return it. Feel free to write us for items you may need that are not listed.

Because of the fluctuation in prices and doubtful availability of materials due to post-war conditions, all deliveries are subject to availability of stock and all prices are subject to change without notice.

Vaccines and Medicinals are on sale at Drug Store Agencies in practically every trading centre throughout Western Canada.

NOTICE

Prices: All vaccines listed are prepaid unless otherwise specified. All other merchandise is priced **F.O.B. Calgary.**

Keep this Booklet for Future Reference

FRANKLIN SERUM COMPANY OF CANADA LTD.

Beveridge Bldg., 611 - 1st St. East, CALGARY, Alberta

A Division of O. M. FRANKLIN SERUM COMPANY

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ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Price Changes are Frequent Now on Certain Classes of Merchandise

THE FACTS ABOUT BLACKLEG

Blackleg is caused by a microscopic organism about one seven-thousandths of an inch long. This organism multiplies very rapidly by one germ dividing into two individuals and these again dividing in the same way.



Blackleg spores are very hardy and resist extreme heat or cold remaining alive sometimes for many years. As a consequence, when a pasture, corral or feed lot is once contaminated, there is no telling how long it will harbor the infection. Disinfecting such premises is impractical. Safety lies in immunization at an early age with a high-grade vaccine.

The careful stockman protects every calf against blackleg. He vaccinates early and prevents the loss of the first calf, for the prevented loss of the first calf will pay for vaccinating quite a herd.

SEASONAL OCCURRENCE, WEATHER CONDITIONS, ETC.

The spring and the fall are the seasons most favorable for development of blackleg, because then a more rapid change in the condition of the calf takes place. The disease is not confined to the seasons, however, but appears at all times of the year with more or less frequency.

The occurrence of the disease in various parts of the world and under all sorts of climatic conditions indicates that location and weather have little influence, either favorable or unfavorable, to the development of blackleg.

SYMPTOMS OF BLACKLEG

Usually the first symptom noticed is a stiffness or lameness in the front or sometimes hind legs and a swelling on the shoulder or hind quarter. As the swelling develops, a crackling sound is usually noticed when the hand is run over the swollen parts. This is caused by gas which forms in connection with the disease. Other general symptoms are high fever, difficult breathing, and loss of appetite.

How Blackleg Is Successfully Controlled

When Blackleg occurs with more or less regularity in a pasture, feed lot or stable, it is due to the presence of the blackleg germ either in the ground of these places or in material (coarse feed, etc.) brought there regularly. Hay cut from infected fields may be the source of outbreaks among healthy herds.

Whenever an animal becomes affected, germs multiply by the million in its system, and their liberation, through natural or artificial means, tends to preserve, increase or spread the infection. When attempts are made to 'doctor' affected animals by opening the swellings, the infection is scattered with the bloody discharge. Infection may be spread over wide areas by dogs, wolves, coyotes and buzzards which attack and devour the carcasses of animals that have died of blackleg.

When a calf is turned upon infected ground it picks up some of the spores which gain entrance to the body in various ways — through the mouth, either with food and water or merely by the animal licking itself. Infection may also enter through abrasions of skin or of the mucous membrane. These spores, under favorable conditions, come into active life, begin to grow and multiply, and if the animal is a susceptible one, it contracts the disease. If it has been immunized, the germ will have no effect whatever upon it.

VACCINATION ONLY METHOD OF BLACKLEG CONTROL

No medical treatment has thus far been found that is effective in the treatment of blackleg.

"The only effective and reliable means known for protecting animals against blackleg is vaccination which has been thoroughly tried and proved to be efficacious." (From page 8 of Farmers Bulletin 1355.) You note this quotation "—for protecting animals against—." This means PREVENTIVE VACCINATION, that is vaccinate sufficiently far ahead of possible infection that a solid immunity can be developed before the animal becomes infected.

"DON'T WAIT — VACCINATE"

HIGH POTENCY ASSURED BY SPECIAL FRANKLIN PROCESS

Any blackleg vaccine is just as potent for protection as the strength of immunizing elements it contains.

Treated cultures of blackleg germs are the essential elements in producing protection against infection. Mere bulk means little, for it is the intensity and strength of the antigenic properties that sets up resistance to diseases.

By the special Franklin method more than 10 cc. of whole culture bacterin is used in making each small 1 cc. Franklin dose.

This intensifying of the immunizing elements produces high potency at the same time eliminating excess bulk.



The process is more costly for the manufacturer, but the satisfaction received by stockmen through its use has built up an enviable reputation for the Franklin brand. Demand has steadily increased. Production facilities have repeatedly been enlarged. Today, the Franklin brand is the largest selling make on the market.

The Franklin concentrated dose is but one-fifth the size of the whole culture dose; therefore, a smaller syringe is used, which is much handier and quicker. This is an appealing feature to the man who does the vaccinating.

DR. FRANKLIN PLAYED AN IMPORTANT PART IN THE DEVELOPMENT OF BLACKLEG VACCINES

Two outstanding improvements in Blackleg biologics have been brought out in recent years. Both were developed by Dr. O. M. Franklin.

The first was the well-known Kansas Germ-Free Liquid Blackleg Aggressin.

Later came Blackleg Bacterin, so new and original that patents were issued to Dr. Franklin.

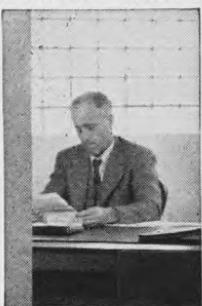
America's big-scale cattlemen and America's consistent show winners and breeders, as well as the rank and file of America's cattle producers, have long proven the dependability and economy of the Franklin Concentrated Culture Blackleg Bacterin. Its long record of a practical one dose immunity has given the Franklin brand a place of dominant leadership.

We submitted questionnaires to a representative list of Franklin users asking them as to their vaccinating methods and results.

Among other things, we asked them if they re-vaccinated their very young calves that were vaccinated in the round-up at from one to six weeks of age. They have all said "No."

These cattlemen, some of whom are the largest operators in the world, unanimously

state their freedom from blackleg losses since they started vaccinating regularly with Franklin's. They furthermore state that they never have complaints from buyers on account of blackleg losses between the time of purchasing and final marketing of the cattle.



Dr. Franklin

It has been generally considered that calves vaccinated under three months of age might sometimes outgrow their immunity. However, the preponderance of evidence taken from actual experience of numerous cattlemen since Franklin Con-

centrated Culture Bacterin was introduced has proven to them that a second dose is unnecessary. This seems to be due to the extra protection given by its high potency.

No blackleg vaccine made affords earlier protection, longer protection or more positive protection.

Franklin Blackleg Bacterin has never in its entire history been cheapened to compete in the scramble for cut-price business. Buy it with confidence—use it with assurance that you are getting a maximum of protection and the utmost in value for your money.

THREE ADVANTAGES OF THE FRANKLIN SMALL 1-cc. DOSE

1. HIGHEST IMMUNITY RATIO

Compare a 1 cc. dose of Franklin Concentrated Culture Bacterin with a 5 cc. dose of whole culture blackleg bacterin (regardless of the trade name under which it is sold).

Each 1 cc. Franklin dose contains the major immunizing elements of more than 10 cc. of whole culture bacterin. In other words, well over 10 cc. of whole culture bacterin is used in making each 1 cc. Franklin dose.

The ratio of killed cultures being more than 10 to 1, it is easy to understand why the Franklin product confers such dependable and lasting immunity. That is why the Franklin small dose has been widely known as a Double Strength vaccine.

2. UNSURPASSED RECORD

Many millions of the small 1-cc. Franklin dose have conferred immunity for large and small cattle owners since early in 1923. This record of dependable lifetime immunity is so nearly perfect that we know of no biological product that has matched it.

3. GREATER CONVENIENCE

Because the Franklin small 1 cc. dose is condensed to a bulk but one-fifth as large as whole culture bacterins, it is much more convenient to handle. Operators like the small, fast-action syringe, and once they use it, do not willingly return to the large syringe required for 5 cc. doses.

HOW TO VACCINATE



The only instrument necessary is a small hypodermic syringe, graduated for 1 mill (1cc) doses and preferably holding 6 doses. Such are marked on the graduated stem to aid one to accurately gauge the dose.

Do not remove cork or pour bacterin out of bottle thereby exposing same to outside contaminations. Fill syringe by drawing bacterin out thru clean hypodermic needle inserted thru rubber cork after first wiping cork with pledget of cotton which has been soaked with a good disinfectant.

Inject Franklin Concentrated Culture Bacterin underneath the skin—the side of the neck or just in front or back of the shoulder are convenient and practical places. See that fluid remains under skin when the needle is withdrawn.

Syringes and needles should be thoroughly sterilized before using and needle disinfected between each injection to eliminate any chance for introducing infection into the herd.

Detailed directions accompany each shipment.

Keep vaccine in a dark, cool place, at not over 5°F. All of contents of each bottle should be used at time bottle first opened.

Syringes fill best and with less waste of vaccine when the larger size bottles are used; therefore the 25, 50 and 100-dose sizes prove more economical and practical.

Do not use same needle for vaccination as used for drawing bacterin out of bottle.

Disinfect needle used for vaccinating by drawing same through a piece of cotton saturated with Franklin Cresolis U.S.P. or similar concentrated disinfectant between each operation, thereby preventing the chance for carrying infectious germs on the vaccinating needle from one calf to another. Franklin Blackleg Bacterin does not harm or throw a healthy calf off feed even though it gets an overdose.



WHEN TO VACCINATE

Spring and Fall seem to be the seasons when blackleg is most prevalent, although it is not confined to these seasons. Any change in the food supply which favors rapid change in the physical condition of calves renders them subject to the disease.

Thus, weaning time or a change from light to heavy feed, or vice-versa, gives the disease a favorable opportunity.

The time to vaccinate is while the calf is young and before there is risk of loss from blackleg. This will be governed largely by

the locality and by the season, but be sure to vaccinate early enough so that the calf has its protection before the expected infections may occur.

"DON'T WAIT — VACCINATE"

While calves may be vaccinated at any age, the important thing is to vaccinate early enough to avoid losses — immunize every calf in time to eliminate the early losses that so often occur when vaccinating is delayed.

FRANKLIN CONCENTRATED CULTURE BLACKLEG BACTERIN



ALL YOU NEED FOR SUCCESSFUL VACCINATION

With a bottle of Dr. Franklin's Blackleg Bacterin, a syringe and some disinfectant, the vaccinating of a herd of calves is quickly and safely accomplished.

This formula consists of a chemically killed concentrated whole broth culture of Clostridium Chauvei which was originally recovered from typical cases of blackleg.

Uses: Recommended for the immunization of cattle and sheep against blackleg.

Dosage: Using aseptic precautions inject 1 cc. under the skin prior to the time of any possible infection.

In bottles of 5, 10, 25, 50 and 100-dose sizes. Per dose, **13c.** See your dealer for authorized quantity prices.

These products are obtainable at Drug Store Agencies in practically all trading centres; otherwise can be ordered direct.

Franklin Blackleg Bacterin is now available in 5cc. dose also. Price **13c** per dose.

Stipulate 5cc. dose if preferred, otherwise 1cc. dose will be supplied.

For Syringes, see pages 58 and 59.

FRANKLIN CLOSTRIDIUM CHAUVEI-SEPTICUS BACTERIN

FOR BLACKLEG AND BLACKLEG-LIKE CASES IN WHICH CLOSTRIDIUM SEPTICUS IS A PREDOMINATING ORGANISM

For many years and more frequently during recent years, in many cases where outward symptoms indicated blackleg and where blackleg was suspected as the cause of the loss after field examinations, laboratory examination showed that the cause of death was not due to blackleg (clostridium chauvei) but that it was caused by a blackleg-like condition in which Clostridium Septicus was the causative organism.

It is practically impossible to distinguish one from the other—that is, blackleg from malignant edema—by field examination; and only by careful laboratory examination is it possible to definitely distinguish one from the other. In support of this statement, we quote as follows:

DISTINGUISHING BLACKLEG FROM OTHER DISEASES

From p. 7 of Farmers' Bulletin No. 1355: "It is difficult to distinguish between the swellings of blackleg and those of malignant edema, as they resemble each other very closely, and both are distended with gas."

From page 3 of Farmer's Bulletin No. 1018: "Because of their acute course, high fever, and rapid termination in death, some difficulty may be experienced in distinguishing anthrax (carbuncle), malignant edema (swelling), and blackleg from hemorrhagic septicemia.

"Blackleg and malignant edema may be detected usually by the formation of gas within the swellings upon the body, and the bubbles thus developed will produce a crackling sound if the fingers are pressed over the affected area."

Our experience indicates that it is likely that in many cases of death loss of calves where no laboratory examinations were made and where blackleg was suspected,



laboratory examinations if they had been made, would have revealed that the cause of death was Clostridium Septicus (the causative organism of malignant edema.)

Death losses from this cause (malignant edema) have become sufficiently extensive and frequent, in many sections of the country at least that protection is needed by stockmen. Because of this apparent need for protection we are now producing a combination product known as Clostridium Chauvei-Septic Bacterin which contains a full dose for blackleg as well as a full dose for malignant edema. Clostridium Chauvei is the causative organism of blackleg; Clostridium Septicus is the causative organism of malignant edema. Our continuous and extensive research and progress in production efficiency makes this additional protection available to the stockmen at no additional cost.

CL. CHAUVEI 50% CL. SEPTICUS 50%

The formula of this product consists of chemically killed organisms isolated from typical field cases of blackleg and blackleg-like cases in which Clostridium Septicus was the predominating organism.

Uses: Recommended for the immunization of cattle against blackleg and blackleg-like conditions caused by Clostridium Septicus.

Dosage: Using aseptic precautions, inject 2cc. under the skin prior to the time the possible infection may occur. Packaged in 5, 10, 25 and 50 dose bottles. Price, **13c** per 2cc. dose. Discount on quantities.

(Caution: Do not confuse Malignant Edema with Pulmonary Edema. This product is not for Hemorrhagic Septicemia or Pulmonary Edema.)

Franklin Clostridium Chauvei Septicus Bacterin is now available in 5cc. dose also. Price **13c** per dose. Discount on quantities. Stipulate 5cc. dose if preferred, otherwise 2cc. dose will be supplied.

HEMORRHAGIC SEPTICEMIA

ALSO KNOWN AS SHIPPING FEVER IN CATTLE AND SHEEP
AND SWINE PLAGUE IN HOGS.

The disease known as hemorrhagic septicemia is infectious and highly fatal and attacks cattle, sheep, horses, swine, poultry, rabbits, etc.

The name "hemorrhagic septicemia" was given the disease because it is a septicemia or poisoning of the blood, and produces hemorrhages in body tissues and vital organs of animals. *Pasteurella bollingeri* (*bovisepicita*) is the germ considered to be cause of the disease in cattle. This organism is often found in air passages of normal animals. It is considered that under certain conditions these germs become virulent and that animals harboring them readily develop the disease when their natural resistance is lowered.

The disease and its associated infections produce varied forms of the malady, as indicated by post mortem and other findings, which have been classed as acute, sub-acute or chronic and sub-cutaneous. Young animals are more susceptible, but under conditions of lowered resistance and severe exposure, animals of any age are apt to contract the disease.

SYMPTOMS OF HEMORRHAGIC SEPTICEMIA IN CATTLE

Cattle are susceptible to an acute form of the disease, which develops rapidly, and often runs a short fatal course. Affected animals show an elevation of body temperature, ranging from 104 to 107°F. The animal may be found dead or dying before the presence of the disease is suspected.

In the sub-acute or chronic form symptoms vary, depending upon severity and principal seat of the disease. In the lung form it is characterized by symptoms of an acute pleuro-pneumonia with a dry, painful cough, nasal discharge, difficulty in breathing, muscular trembling, and when caused to move the animal exhibits distress, a marked stiffness, and may actually appear to be lame. In this form of the disease the animal refuses feed and loses flesh very rapidly. Their abdomens become "tucked up" and the eyes become sunken.

In the sub-cutaneous form there is a marked local inflammation and soft swellings under the skin which pit on pressure, about the head, throat, dewlap, legs and shoulder, and even throughout the system.

These soft swellings pit on pressure with the fingers. When swellings are cut, they are found to contain a straw-colored, inflammatory discharge tinged with blood. There may be a blood-tinged discharge from the nostrils, and strings of mucus may hang from the mouth. The nostrils often reveal small hemorrhages, or blood spots, just beneath their lining membranes. The eyelids may become highly inflamed and tears may flow.

There is an intestinal form in which the changes are found chiefly in the abdominal cavity, or the intestinal form may develop after the disease has appeared in the lungs. In the intestinal form, digestive derangement is pronounced, also constipation, later followed by diarrhea. Droppings are frequently blood-stained and the urine may be tinged with blood.

SO-CALLED SHIPPING FEVER

A large number of outbreaks of hemorrhagic septicemia, particularly in cattle and sheep, are associated with shipment of animals from one point to another. Infection usually makes its appearance a few days after animals reach their destination. The vitality of the animals is lowered as a result of the rigors of transit, and as a result, some animals become highly susceptible to infection.

Hemorrhagic septicemia in cattle is often, if not generally, complicated by other infections. Infection by corynebacteria known as pulmonary edema is a frequent complication. The labored breathing which is common in such cases has caused the term "pumpers" to be applied to animals so afflicted.

Pneumonia of an infectious character may be caused by a number of different infectious micro-organisms and the non-infectious type is also of frequent occurrence and has much the same general symptoms as hemorrhagic septicemia. Sudden weather changes or exposures resulting in chilling of animals is perhaps one of the most common contributing factors to pneumonia and hemorrhagic septicemia.

These infections are not confined to animals exposed in shipping, but they also develop on home ranges, and in feed lots, more especially during the fall, winter, and spring months.

HEMORRHAGIC SEPTICEMIA

ALSO KNOWN AS SHIPPING FEVER IN CATTLE AND SHEEP AND SWINE PLAGUE IN HOGS. PREVENTION AND CONTROL MEASURES.

Considering that handling, exposures and abrupt changes in feed are important factors, all measures that can be taken to avoid pre-disposing conditions, such as overheating from driving, crowding in pens or cars, overfeeding or overwatering before proper rest and lack of rest, feed, water and shelter during transit should not be overlooked or neglected as preventive measures.

From Leaflet 38, issued by the United States Department of Agriculture, "Maintaining the Health of Livestock in Transit," we quote suggestions for reduction of loss due to hemorrhagic septicemia and other diseases of cattle incident to shipping as follows:

"Avoid hard driving and allow ample time for rest before loading. On arrival at pens, animals should not be allowed to fill up on water, but should first have rest and be fed some native grass or nonlegume hay.

"Avoid overcrowding cattle in cars. In cold weather, bed car well. In very severe weather, in northern latitudes, it may be well to line side walls of car with heavy paper, especially if the cattle are young or unthrifty.

"Give feed and water at proper intervals en route. When unloaded for feed, water and rest, the cattle should have plenty of time to become well rested.

"Under the 28-hour law 5 hours' rest is the minimum specified time, and the railroads ordinarily allow that period, exclusive of the time of unloading and reloading. It is better, however to give stocker and feeder cattle special care, allowing at least eight hours for feed, water and rest.

"The common practice of withholding water from animals until they are very thirsty so that later they will take a heavy fill is harmful. It tends to upset the digestive system so seriously that animals are slow in resuming normal feeding and gain in weight.

"In case of stocker and feeder cattle that pass through the public market, the same attention should be given to shipments back to the country that has been outlined for shipments to market. Following arrival of cattle at their final destination in the country, they should receive special attention and

care to help them over the period of lowered vitality resulting from the hardships of travel.

"Feeder cattle on arrival should be given a fill of dry roughage, such as timothy hay, prairie hay or corn stover. After having access to this roughage a few hours, they should have water, but not all they will drink. By the end of the first day, give free access to dry roughage and water.

"If cattle arrive in cold weather, especially if it is wet and stormy, provide adequate dry shelter. Severe exposure to cold and dampness combined, during period of low vitality, is liable to have very serious results. If there is any sign of sickness, segregate diseased animals and keep them quiet."

Combining the above suggested handling methods with vaccination affords a large degree of practical protection against hemorrhagic septicemia and associated infections. The most effective means known for avoiding such disease in cattle is vaccination for stimulating immunity response against causative organism. Calves should be vaccinated in fall as a general routine procedure, preferably 10 days or two weeks before shipping or weaning time, or other unusual and trying exposure such as radical changes in feed or severe weather. Vaccination at least 10 days in advance of weaning or shipping is highly advisable in order to provide time necessary for development of all increased resistance one dose of vaccine may be capable of producing. A second dose administered in 3 to 5 days should increase the effectiveness and provide added protection.

When calves cannot be vaccinated prior to shipping and where they are vaccinated at time of shipping or while in transit, many cattlemen are making a practice of administering a second dose on arrival at destination. Such cattle should be closely watched for several days after arrival and should any of them show symptoms of development of hemorrhagic septicemia, they should be segregated and treatment measures employed promptly. Calves and yearlings are more susceptible than older cattle; therefore, it is advisable to revaccinate yearlings before they go in the feed lot or on winter feed.

FRANKLIN CORYNEBACTER- IUM PASTEURELLA BACTERIN

This formula consists of chemically killed bacteria recovered from infections in cattle.

Pasteurella Organisms (Hemorrhagic Septicemia) ... 66 2/3%

Corynebacteria 33 1/3%

Uses: To aid in preventing infections in cattle in which pasteurella organisms (hemorrhagic septicemia) and Corynebacterium organisms are involved.

This is the same basic formula used in our former Bovine Pulmonary Mixed Bacterin and our more recent Pasteurella-Pseudodiphthericum Bacterin but contains a greater density of killed bacteria than the former.

This Franklin bacterin contains a high percentage of killed bacteria. A 2cc. dose of this product contains the equivalent dosage of killed cultures of the hemorrhagic septicemia organism as that contained in 2 cc. doses of Franklin Hemorrhagic Septicemia Bacterin, and in addition, it contains the killed bacteria of the Corynebacterium organism, isolated from pulmonary edema in cattle.

It will effectively render every service that can be expected from the use of Hemorrhagic Septicemia Bacterin, and is to be preferred because of its additional value in stimulating resistance against infections in which Corynebacterium organisms are involved. We recommend it as a practical product for stimulating resistance against these two organisms, although it is not intended for use in controlling other infections or all forms of pneumonia. Non-infectious pneumonia is of frequent occurrence and cannot be prevented by vaccination.

Dosage: For healthy cattle, 2cc. Using aseptic precautions inject under the skin early enough before a possible attack to allow an increase in resistance to develop ahead of the possible attack. A second dose double or more, in 3 or 4 days may increase the initial effect. Infected animals should be isolated and strict sanitary measures employed.



Price: 20-cc. bottle (10 normal doses), \$1.10; 100-cc. bottle (50 normal doses), \$5.50. Quantity prices, 100 doses or more.

INFECTIOUS KERATITIS COMMONLY CALLED "PINK EYE" IN CATTLE

This acute condition affecting the eye tissues of cattle may spread through the herd. It causes serious economic loss, not because of its morbidity rate, but because of the affected animals' inability to see, they are unable to find sufficient food and water. The loss in weight by semi-starvation and the rapid dehydration due to insufficient water rapidly mounts into large figures.

The disease is more prevalent in some years than in others. However, the average annual loss runs high. Some authorities state that the high annual economic loss from Pink Eye makes it one of the most serious maladies affecting cattle.

The exact cause of the condition known as Pink Eye has not been definitely established. Some claim that the principal cause is *Hemophilus Bovis*, a bacterial organism. Others maintain the predisposing cause is a nutritional deficiency which is more pronounced in dry years. Still others claim the exciting cause is an irritation that may result from dust, alkali, injuries resulting from rough forage or brambles on the range, injury by other cattle, etc. There is another view presented by veterinarians, who have studied the disease closely, that the malady begins within the eye itself in the anterior chambers of the eye. Until such questions are settled, the cattleman can lessen his financial loss by practicing all preventive measures that may reduce its occurrence.

Since prevention is always not only more efficacious but less costly than attempted remedial measures after the disease has established itself, it is important that stockmen look first to the general well-being of their cattle, putting in practice all those measures which will strengthen the animal and promote growth. In so far as practical the animal's diet should be well balanced from a nutritional point of view. Supplementary vitamins, minerals, and protein feeds to balance any possible forage or range deficiencies, arrangements to provide

adequate water especially during dry years, not only yield greater financial returns in more beef but will also help to strengthen the animal against possible Pink Eye. Constant and close inspection of the herd so as to remove and isolate all new cases as soon as they appear will help to stop its spread if it is infectious.

Whatever the exciting cause of the condition may be as the disease advances, secondary infections caused by a number of bacteria may soon follow. For this reason vaccination with a bacterin made from these organisms should increase the resistance of the animal against these secondary invaders and thus lessen the destructive effects which they cause. The organisms that may be found associated with this condition are Pasteurella bollingeri (bovisepica), Corynebacteria, including Corynebacterium pyogenes, pyogenic Streptococci, Staphylococcus aureus and albus.

Infected animals should be isolated from the herd, placed in adequate shelters to reduce the light intensity because the photogenic action of the sun's rays seems to aggravate the condition, and should receive other needed remedial measures among which are easily available food and water.

FRANKLIN MIXED BACTERIN (BOVINE) FORMULA 1

Consists of chemically killed bacteria of the following named organisms isolated from infections in cattle.



Pasteurella bollingeri (bovisepica) 50%
Corynebacterium (including C. pyogenes 15%) 30%
Streptococcus (Pyogenic) ... 10%
Staphylococcus Albus and
Aureus 10%

Uses: To aid in controlling infections in which the above organisms are involved.

Dosage: For healthy animals, 2cc. Using aseptic precautions, inject under the skin prior to the season when such infections may occur.

Resistance against these organisms is often stimulated by large doses, repeated once or twice at intervals of 12 to 36 hours.

Price: 20cc. bottle (10 normal doses), \$1.10; 100cc. bottle (50 normal doses), \$5.50. Quantity prices on 100 doses or more.

FRANKLIN PINKEYE POWDER

A powder for use in the treatment of those minor irritations of the eyes of livestock commonly known as "Pinkeye." The formula consists of 100% active ingredients which have been found to be of value in the treatment of such infections, as follows:



Acriflavine Hydrochloride is used for its value as an inhibitor of bacterial growth, and for its penetrating and long-lasting effect.

Calomel is considered to be useful in the treatment of corneal ulcers which are

so often an after-effect of pinkeye.

Sulfathiazole is used for its bacteriostatic effect on streptococcal and staphylococcal bacteria, and for the good results obtained by its topical effect on mucous membranes.

Sulfanilamide, for its bacteriostatic effect on streptococcal and staphylococcal organisms.

Boric Acid is of value as an antiseptic and exerts a definite soothing action on mucous membranes.

The formula is especially prepared in powdered form because powder offers ease of administration, a better clinging effect than may be obtained with liquid or ointment, as well as providing a more concentrated application.

The eye should be cleansed thoroughly, but gently, with a wad of cotton saturated with boric acid solution. Pinkeye Powder should then be blown into the eye by means of the convenient puffer tube container, taking care to see that the eyeball and the surrounding area is well covered. This treatment should be applied twice daily, or as often as necessary.

Price: 1-ounce puffer tube, \$1.20.

FRANKLIN EYE OINTMENT

A preparation containing Yellow Oxide of Mercury in a petrolatum base.

To be used as a local application in the eyes of animals as an aid in relieving minor irritations of the mucous membranes.

Price: 1-ounce tube, 85c.

BACTERIAL MASTITIS

This udder condition, caused by bacterial infection, is perhaps one of the most difficult problems with which dairymen, especially, have to deal.

The best preventive measures against infective Mastitis are based on a knowledge of all possible means of transmission and infection. While not definitely established, it is assumed that infection is passed from one cow to another by the udder and teats coming in contact with infected floors, milking machine cups, and the hands of the milker. Consequently, to reduce these possibilities to a minimum, the barn floor should be kept sanitary; cows should not be kept in the barn except while being milked or during extremely inclement weather; milking machine cups should be dipped in a chlorine solution and rinsed in fresh water before being attached to each cow; and the milker should wash and disinfect his hands after either stripping or milking each cow. By such means the transfer of the infection from one cow to another is minimized.

Since the organisms may gain entrance into the cow's udder either by way of the teat canal or through chapped, abraded or cut teats or udder, these channels of infection should be closed as far as possible by leaving the teat dry and by washing and disinfecting cuts and scratches on the teats or udder after each milking. Some dairymen not only cover the cuts and scratches with New Skin after cleaning and disinfecting, but also religiously keep pastures, corrals, barnlots, etc., free from brambles, loose wire, projecting nails, etc., so as to reduce cuts and scratches to a minimum.

It has been likewise found that when udders are cleaned with a damp cloth, it is a simple matter to transfer an infection from one cow to another by means of the cloth. Consequently the more successful dairyman now hoses off the cows' udders while on a concrete slab before the cows enter the barn.

Some scientific knowledge indicated that the condition known as Mastitis may be caused by a number of different organisms. The organisms that are most commonly found associated with this condition are pyogenic Streptococci, Corynebacterium pyogenes, the Staphylococci aureus and albus, and occasionally Escherichia coli. Vaccination with a suitable biological prep-

aration containing these organisms should increase the resistance of the animal against such mixed infections.

FRANKLIN MIXED BACTERIN (BOVINE) FORMULA 2

Consists of chemically killed bacteria recovered from typical infections in cattle as follows:

Streptococcus (Pyogenic)	50%
Corynebacterium	
Pyogenes	30%
Staphylococcus Aureus	10%
Escherichia Coli	10%

Uses: To aid in controlling infections in which the above organisms are involved.

Dosage: For healthy animals, 2cc. Using aseptic precautions inject under the skin prior to the season when such infections may occur. A second dose, double or more, in 3 to 5 days should increase the initial effect.

Price: 20cc. bottle (10 normal doses), \$1.10.

Quantity prices on 100 doses or more.

MASTITIS TEST BLOTTERS

Mastitis Test Blotters provide a quick, effective means of detecting infected cows in the herd. Keep a supply on hand at all times and frequently test all cows in the milking herd.

KO-EX 7 Brom Thymol Mastitis Detectors with the green spots and guide on each card. Price: Box of 50, \$1.50.



ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN PENICILLIN PRODUCTS

GENERAL INFORMATION

Penicillin is a chemotherapeutic agent of exceptional potency against a variety of microbial infections. It is virtually non-irritating, yet exerts a powerful bacteriostatic action against most strains of Streptococci, Staphylococci, Clostridium welchii, and other Clostridia, Actinomyces, Bacillus anthracis, Erysipelothrrix rhusiopathiae, Corynebacteria, and Leptospira. Penicillin is ineffective against infections caused by gram-negative bacilli and virus infections.

Bovine Mastitis. Available experimental data indicates that mastitis caused by *Streptococcus agalactiae* yields readily to penicillin therapy; however, inconsistent results have been obtained in treatment of mastitis caused by Staphylococci and Corynebacteria. Penicillin is not effective for the treatment of mastitis caused by colon bacilla, or similar organisms.

Generalized Infections. Penicillin therapy should be continued per directions until symptoms subside. Symptomatic treatment should be administered to supplement Penicillin therapy.

Surgical Infection of Body Cavities and Joints. In the treatment of abscesses, empyema (accumulation of pus in the chest), and suppurative arthritis (accumulation of pus in the joints), the pus should be withdrawn by needle and syringe prior to each local injection of penicillin solution. The best results are obtained in these cases when the use of penicillin is combined with surgical treatment.

Penicillin is available in three forms, each with a specific reason for its particular use, as follows:

PENICILLIN OINTMENT, VETERINARY is primarily used in the treatment of Mastitis by means of instilling directly into the teat canal. Comes in handy tube containing 100,000 units Crystalline Penicillin G Potassium in suitable ointment base, with special udder infusion canula attached for easy insertion into the teat canal. Each tube is considered sufficient for one treatment of one quarter, to be repeated per directions enclosed with each package. It may also be used as a local application to wounds in which the use of Penicillin may be beneficial.

CRYSTALLINE PROCAINE PENICILLIN

G IN OIL, VETERINARY is recommended for general intra-muscular injection. Its action is delayed and Penicillin is released into the blood stream gradually. This permits injection of a greater number of units at one time, thereby making the necessity for subsequent injections and handling of animals less frequent. Available in 10-cc. vials containing 100,000 units per cc., or in 10cc. vials containing 300,000 units per cc. Complete directions for use included with each package.

CRYSTALLINE PENICILLIN G SODIUM is readily soluble in sterile normal saline or distilled water for intramuscular injection.

May also be administered into the teat canal in treating Mastitis. After administration it is quickly released into the blood stream and is recommended as the means for rapidly establishing the desired blood level which may be maintained by subsequent injections of Crystalline Procaine Penicillin G in Oil at less frequent intervals. Crystalline Penicillin G Sodium is available in vials of 100,000, 200,000 and 500,000 units. Each package contains complete directions for preparation and use.

Note: Directions for use of Penicillin in all forms should be carefully consulted and followed exactly.

Sterile Saline Solution for use in diluting Crystalline Penicillin G Sodium, and for preparation of dilute solutions, is listed on page 20.

Udder Infusion Tubes, for use in injecting Penicillin and other medications into the teat canal, are listed on page 62.

Write for prices on Crystalline Penicillin G Sodium and Crystalline Procaine Penicillin G in Oil.

For prices on penicillin bougies, penicillin ointment, penicillin-streptomycin bougies and ointments, see page 15.



PROPER CARE OF COWS' UDDERS PAYS DIVIDENDS

Proper care of cows' udders is one of the most important steps in good dairy management. A program of periodic examination and treatment should be carried out. Daily use of a reliable ointment and massage will greatly reduce the frequency of chapped, cracked teats, thus eliminating a possible contributing factor to udder ailments of more serious nature. In the program followed, one of the steps should be to frequently check each animal for possible presence of a mastitis condition. In this procedure, the use of Mastitis Test Blotters makes the operation quick and accurate. In cases of serious udder ailments, the services of a veterinarian should be employed.

FRANKLIN CHAP OINTMENT

Franklin Chap Ointment is especially designed for daily use to keep the teats and udders of dairy cows soft and pliable, and free from chaps, cracks, and other sores. It is an antiseptic, soothing, protective ointment in Lanolin and Petrolatum base, and because it does not impart odor or taste to milk it may be used regularly after each milking.

Franklin Chap Ointment is also suggested for use as a protective dressing against chapping and sunburn prior to exposure, and as a dressing to relieve discomfort due to these conditions following unprotected exposure.

Price: 8-oz. tin, **\$1.20.**

FRANKLIN UDDER-EZE

Franklin Udder-Eze is particularly adapted for use in massaging of udders to relieve minor congestions which may be present following calving, as it possesses stimulative, soothing, protective and antiseptic qualities. The use of hot packs in connection with application of Udder-Eze and massage will increase the effectiveness of treatment. Franklin Udder-Eze is of equal value as an emollient and counter-irritant for the treatment of chaps, cracks, and minor skin irritations; also strains and muscular soreness due to over-exertion or fatigue.

Prices: 8-ounce tin, **\$1.00;** 128 oz. can, **\$7.50.**



WAX TEAT DILATORS

For use in keeping the teat canals of cows open, following the removal of obstructions, closures due to irritations, sores at opening of the canal; and as an aid in enlarging the teat canals of "hard milkers." Dilator should be left in teat until the next milking. Continue use until the condition is relieved.

Prices: Envelope of 25 Dilators, **40c;** Box of 100 Dilators, **\$1.25.**

PENICILLIN BOUGIES (FOR BOVINE MASTITIS)

FOR LIGHT PRODUCERS:

Vial of 12—10M Unit Bougies **\$2.00**

FOR HEAVY PRODUCERS:

Vial of 6—25M Bougies **1.50**

Vial of 12—25M Bougies **2.50**

FOR SEVERE INFECTIONS:

Vial of 6—100M Unit Bougies **4.50**

BOVICILLIN PENICILLIN OINTMENT

"One-Pinch." For Bovine Mastitis.

4 gm. Applicator Tube—100M Units **.75**

PENI-MYCIN BOUGIES

15,000 I.U. Penicillin—15,000 Mcgms. Streptomycin. For Bovine Mastitis.

Vial of 6 **\$1.50**

Vial of 12 **2.50**

PENI-MYCIN OINTMENT

100,000 I.U. Penicillin—100,000 Mcgms. Streptomycin. For Bovine Mastitis.

"One Pinch." 4 gm. Applicator Tube—200M Units **\$1.00**

(Write for prices on Crystalline and Procaine Penicillin.)



FRANKLIN SALINE PURGE FOR CATTLE



Containing Nox Vomica, Ginger, Gamboge and Magnesium Sulphate in suitable combination for a safe and dependable purgative.

An excellent purgative for use in relieving simple constipation and simple impaction. Increases peristalsis and tends to produce a watery stool.

Price: 1-pound package, \$1.00; 10-pound package, \$6.00.

FRANKLIN UTERINE CAPSULES

FOR ASSISTING IN REMOVAL OF RETAINED AFTERBIRTH IN COWS

If afterbirth is not expelled during the first 24 hours after calving, examination may disclose considerable inflammation of the uterus. In such cases the membranes adhere very tightly and their forceful removal would further irritate the uterine wall. Two or three Franklin Uterine Capsules inserted at this stage will

usually cause the membranes to come away and aid in preventing septic infection. One capsule should be placed well back in each horn of the uterus and possibly a third one in the main cavity.

Ordinarily one treatment of this kind is sufficient to loosen the membranes and prevent or destroy septic infection. However, when the membranes have been retained for several days and putrefaction is quite marked, a second treatment is advisable.

Packed in cartons of three No. 7 capsules. Price per carton, \$1.00; Box of 12 capsules, \$3.30.



"RUMEN-EZE"

RUMEN COMPOUND TABLETS

60 Grains

Indications:

To stimulate rumination in cattle.

Formula:

Each Tablet Contains:

Barium Chloride	30 grains
Tartar Emetic	30 grains
Strychnine Sulfate	1/2 Grain

Mode of Treatment:

One or two tablets every three hours depending on the size of the animal and severity of the impaction.

Price: Bottles of 100, each \$2.75

DIETHYL STILBOESTROL D.P.

Diethyl Stilboestrol Dipropionate in Oil is well suited for use in large animals due to its prolonged effect when given intramuscularly.

Formula:

10 mg. per cc.

Indications:

As an aid in the treatment of retained afterbirth and endometritis and to initiate estrus or heat.

Mode of Treatment:

Cows and Mares 20 to 25 mgs.

Sows 5 to 10 mgs.

Bitches 0.5 to 3.0 mgs.

Price: 25cc. vial (rubber capped) each, \$2.50.

UTERCILLIN TABLETS

Sterility and difficult breeding are often the result of Uterine or Vaginal Infection contracted after a previous calving.

Utericillin Tablets, each containing 25,000 Units Penicillin, 7 1/2 Grains Sulfathiazole and 7 1/2 Grains Sulfanilimide, effectively treat the deepest-set bacteria without irritating sensitive organs or destroying white blood cells.

Utericillin Tablets are recommended in the treatment of retained afterbirth and uterine-vaginal infection.

Prices: Vial of 3 tablets, each \$1.25

Bottle of 25 tablets, each 8.50



INFECTIOUS CALF SCOUR KNOWN AS WHITE SCOURS IN CALVES

The condition commonly referred to as white scours is an infectious disease of young or newborn calves, characterized by a profuse diarrhea and rapid exhaustion. The majority of animals affected are very young, frequently less than 48 hours old, and generally less than 5 days old, but in severe outbreaks spreads to older calves. The infection is sometimes present at birth. This disorder may be the result of one or more causes among which the invasion of germs is perhaps the most conspicuous and most important economically. Outbreaks are frequent in calves dropped in barns or corrals but less frequent in calves born in open pasture.

SYMPTOMS

Symptoms vary somewhat in individual cases. At birth, the calf may appear normal or occasionally it may be weak and have a dull listless appearance; usually within 48 to 72 hours a profuse yellowish-white diarrhea develops. Color gradually changes to a brownish tint, frequently streaked with blood. Affected calves have a tendency to sleep much of the time and the appetite is very poor. Rate of breathing increases as the disease progresses.

PREVENTION

Food: A nutritional deficiency may be a predisposing cause. The diet of the pregnant cow may need minerals, vitamins, proteins, etc. The forage and grain should be high grade. If necessary they should be enriched with mineral, vitamins, and protein supplement.

Prevention of primary infection is of utmost importance. Providing the greatest cleanliness at the time of birth and during the first few days thereafter is vitally important. In hand feeding it is highly essential that all pails be thoroughly cleaned and sterilized before being used. Avoid over-feeding. One pint of lime water at each feeding morning, noon, and night is considered a helpful measure; as well as disinfecting the pens or stalls; providing plenty of clean bedding and painting the navel cord with tincture of iodine.

Likewise, in order to stimulate resistance against the organisms that are usually associated with such condition, the calves should be vaccinated immediately after birth with a bacterin composed of the organisms that are usually present in Infectious Calf Scours.

These organisms are *Escherichia coli*, *Salmonella enteritidis* (Gaertner), *Aerobacter aerogenes*, and *Pasteurella bolingeri* (bovisepica). Also, since these organisms may spread to older calves and cause dysentery, calf pneumonia, and other manifestations, the older calves should likewise be vaccinated with an antigen containing killed cultures of these organisms.

"DON'T WAIT — VACCINATE"

FRANKLIN MIXED BACTERIN (BOVINE) FORMULA 3

This formula consists of chemically killed bacteria originally recovered from infections in calves.

Escherichia Coli	30%
Salmonella Enteridis (Gaertner)	30%
Aerobacter Aerogenes	20%
Pasteurella bollingeri (Bovisepica)	20%

Uses: To aid in controlling infectious calf scours.

Dosage: For non-infected calves, 2 cc. doses injected under the skin as soon after birth as possible. For small calves, 1 cc. A second dose, double or more, following in 3 to 5 days, should increase the initial effect.

Price: 20-cc. bottle (10 normal doses), \$1.10. Quantity prices on 100 doses or more.

CAUTION

Occasionally the use of Mixed Bacterin (Bovine) Formula 3 will produce a shock (occasionally fatal) on the order of anaphylaxis in young animals. Therefore, in case of previous vaccination of dam or offspring, or where the disease is prevalent on premises or in herds, a test should be made for sensitivity by administering a minute dose (approximately one-tenth of a cc. of Franklin Concentrated Bacterin) and allowing several minutes in which to observe for reactions before the full dose is used. Animals which exhibit marked reaction should be promptly treated for shock. Adrenalin (Epinephrine) solution, sterile 1-1000, administered intravenously is a specific remedy for anaphylactic shock.

Dosage: Large animals, 4 to 8 cc. Small animals, 1/4 to 1 cc. When injected intravenously these dosages should be diluted with 10 cc. of sterile, normal saline, per cc. of Adrenalin solution.



PREVENT LOSSES FROM SCOURS IN YOUNG LIVESTOCK

Scours in young livestock, annually costs stockmen millions of dollars in losses. The cause of scours may be difficult to determine, but is generally considered to be due to infections, feed conditions, or to vitamin deficiencies. Whatever the cause, there are certain fundamental steps that should be taken for prevention or treatment. (See page 17.)

In treating scours, either infectious or that which is due to feeding conditions, it is important to: (1) Remove the offending material from the bowels by the use of castor oil or other suitable purgative; (2) Inhibit the growth of bacteria (in the case of infectious scours) by use of sulfonamides or other medicinal agent; (3) Treat the irritated membranes of the intestines or bowels with suitable astringents; (4) Maintain the strength of the animal and avoid dehydration by feeding small amounts of nourishing gruels of oatmeal, linseed or barley meal, raw eggs, or milk, at frequent intervals, by force feeding if necessary.

Strict sanitary measures should be enforced to avoid spread of the infection from one animal to the other. In the event of serious outbreaks of scours, the services of a veterinarian should be employed.

SULFATAN BOLUSES

For the treatment of infectious scours and enteritis in calves, foals, and lambs. These boluses contain 30 grains Sulfathiazole to supply the inhibiting agent against *E. coli* and other susceptible organisms, and 30 grains Albumin Tannate to provide astringent action necessary for irritated membranes.



two Sulfatan Boluses to provide this amount of Sulfathiazole. A dose of castor oil (about 4 to 6 ounces) should precede treatment by about an hour to remove as much of the offending material as possible. Administration of Sulfatan Boluses should be repeated at 8-hour intervals for two or three days, reducing these subsequent doses to $\frac{1}{2}$ the initial dose.

Dosage for foals and recommendations for treatment are the same as for calves.

Dosage for lambs should be modified according to weight of the animal. Sulfatan Boluses may be broken in half to permit smaller doses.

These boluses may be administered with a balling gun or capsule forceps, or may be crushed and mixed with the feed.

Caution: Directions on the container should be followed closely for best results.

Prices: Individual treatment package containing six 60-grain boluses, \$1.50. Quantity package containing twenty-five 60-grain boluses, \$4.50.

FRANKLIN CALF POWDER

An antacid and soothing agent for use in treatment of simple digestive scours and to supplement specific treatment of infectious scours in young calves. Calf Powder should be given at each feeding, giving a heaping tablespoonful with the feed.

Although not intended as a specific treatment for infectious scours, it may be used to supplement specific treatment with sulfonamides or other drugs regarded as specifics. Symptomatic treatment should be employed to supplement medication, and sanitary precautions should be observed.

Prices: 8-ounce package, \$1.20; 1-pound package, \$1.95.

"CALVITA" CALF SAVERS

"Calvita" Calf Savers are a highly concentrated dietary vitamin supplement that provide in a convenient capsule the 5,000 Int. units vitamin A and 50 mgms. niacin recommended by nutritional experts plus an additional 20,000 Int. units vitamin A during the particularly vulnerable first seven days of a calf's life.

Each Calvita capsule also contains 500 Int. units vitamin D, which is effective in preventing rickets and aids in sound bone and teeth development.

Price: Single Treatment Package (21 capsules), \$1.25. Five Treatment Package (105 capsules), \$4.50.

"Vitamin supplementation of calf's rations is a preventive treatment, and for best results should be started as soon after birth as possible."



FRANKLIN STERILE SOLUTIONS

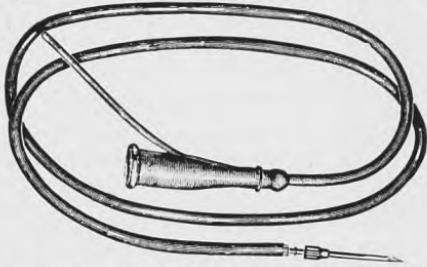
Directions for Intravenous Injection

To prepare for an intravenous injection, the site should be clipped and thoroughly disinfected with tincture of iodine or Cresolis solution; the needle should be razor sharp; the solution to be injected should be as near body temperature as possible, but in cases where haste is paramount and there is not too much difference in temperatures, the solution may be given more slowly to compensate for this difference.

The jugular vein may be located by use of a rope tourniquet to distend the vein (see illustration). Grasp the vein and skin between the thumb and forefinger, and insert the needle through the skin directly over the location of the vein and near the pressure point, with the beveled edge next to the skin and the point toward the head. After the skin has been pierced, it is a simple matter to pick up the vein with the point of the needle. Blood will appear when the needle enters the vein, at which time pressure may be released. The bottle containing the solution should then be elevated and some of the solution permitted to run through the hose to eliminate any air bubbles. Then insert the adaptor at the end of the hose into the hub of the needle and permit the solution to flow slowly into the vein. The flow may be regulated by compressing the hose. If signs



DELLETT INTRAVENOUS SET



For use in the administration of sterile solutions intravenously by gravity flow. Set consists of pure gum rubber tubing with gum rubber adaptor to fit any standard neck bottle. Adaptor has air intake tube attached. Needle is 14 gauge, 1 3/4" long, of finest steel.

Price: Set complete, **\$2.25**.

Extra needles, **35c** each.

of shock should occur, the flow should be slowed down or discontinued. Sanitary precautions should be observed at all times.

STERILE SALINE SOLUTION

A sterile solution containing 0.9% Sodium Chloride in pyrogen-free distilled water for the preparation of dilute solutions for intravenous, subcutaneous, or intramuscular injection. Ideal for use in preparing Penicillin Sodium or the sodium salts of various sulfonamides. May be used for the preparation of penicillin or sulfonamide solutions for the intramammary infusion in the treatment of mastitis.



Price: 50cc. vial, **50c**; 250cc. vial, **\$1.25**.

Additional Intravenous Preparations are listed on pages 21 and 22.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN C-L SOLUTION

(Calcium Levulinate Solution)



A sterile solution for intravenous or intramuscular injection in the treatment of Milk Fever and in the correction of blood calcium deficiencies.

C-L Solution offers a stable non-irritating preparation containing calcium equivalent to not less than 23% calcium gluconate.

Dosage: 250cc. for large animals; 25 to 100cc. for swine; 25 to 50cc. for sheep.

Prices: 250-cc. bottle, \$1.00; 500-cc. bottle, \$1.50.

CALCIUM GLUCONATE AND DEXTROSE SOLUTION

A sterile solution for intravenous or deep intramuscular injection in the treatment of blood calcium deficiencies, where the additional benefits of dextrose are desired. For use in treatment of acetonemia (excess production of acetone); heat prostration of horses, convulsions and paralysis in cattle, horses, sheep, hogs and dogs when such conditions are due to or associated with calcium deficiency.

Calcium content is equivalent to 60 grams Calcium Gluconate; Dextrose C.P. Anhydrous 125 grams.

Dosage: 250cc. for large animals; 25 to 100 cc. for swine; 25 to 50 cc. for sheep; 10 to 50 cc. for dogs.

Prices: 250-cc. bottle, \$1.00; 500-cc. bottle, \$1.50.

DEXTROSE SOLUTION

A sterile solution for intravenous use, providing a readily assimilable form of carbohydrate in heat stroke, shock, intestinal statis, acetonemia (abnormal acetone production sometimes accompanying milk fever) and to supply nourishment or to counteract dehydration in acute diseases.

Contains approximately 50% (weight to volume) Dextrose C.P. Anhydrous.

Dosage: 100 to 250 cc. for large animals; 25 to 100 cc. for swine; 25 to 50 cc. for sheep; 10 to 50 cc. for dogs, depending on weight of animal.

Prices: 250cc. bottle, \$1.10; 500cc bottle, \$1.75.

FRANKLIN 6% SODIUM IODIDE SOLUTION

For the intravenous treatment of *Actinomyces bovis* and *Actinobacillus lignies* infections in cattle, commonly known as "lumpy jaw" and "wooden tongue."

In soft tissue lesions of actinomycosis (lumpy jaw), one treatment may be sufficient. Surgical treatment is not necessary in soft tissue lesions, unless abscesses are very large, in which case it is best to incise and treat with Iodized Oil to supplement intravenous treatment.

Bone lesions should be treated surgically and soft bone removed with a curette, giving a second intravenous injection of Sodium Iodide Solution in 10 to 14 days.

Caution: Care should be taken to stop treatment immediately if symptoms of iodism occur. Sodium Iodide Solution should not be used in pregnant animals, as its use may cause abortion.

Dosage: 500cc. for 1000-pound animals; smaller or larger doses in proportion to weight of animal. Young animals seem to tolerate relatively larger doses.

Price: 500cc. bottle, \$2.25.

SODIUM THIOSULPHATE SOLUTION 30%

For treating cases of hydrocyanic acid poisoning, commonly called cane poisoning.

Sorghum, Johnson grass, and Sudan grass are most dangerous when their normal growth has been stopped by drought, frost, or other reasons. "Cane poisoning" acts very quickly, frequently killing the animal within a few minutes after symptoms are noted, although sometimes the animal may live for several hours. It is considered good practice to have several bottles of Sodium Thiosulphate Solution on hand for prompt treatment.

Franklin Sodium Thiosulphate Solution is stable and practically non-toxic. It is administered intravenously and dosage may be repeated at intervals of 4 to 5 hours as required.

Dosage: Horses and cattle, 25 to 40 cc.; sheep, 10 to 20 cc.

Price: 100cc bottle, \$1.25.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

EQUINE INFLUENZA

Also known as strangles or distemper, shipping fever, catarrhal fever, stable pneumonia, etc.



Any condition contributing to reduced vitality favors the development of an outbreak of equine influenza. Exposure in shipping, changes in feeding, and watering conditions increase the chance for its development.

SYMPTOMS

Generally the attack is sudden. There is loss of appetite, extreme weakness, high temperature, watering of the eyes, cough, a fast pulse, and the animal may be affected with either diarrhea or constipation.

The following day after the onset of the disease, it is usually found that there will be a yellowish-gray nasal discharge, swelling in the throat or often on the legs, sheath or other parts of the body. Severe digestive disorders may develop.

PREVENTIVE MEASURES

As in other animal diseases, prevention rather than a belated attempt to cure should be relied upon. Since this condition is more likely to occur in horses and mules in late winter and early spring than at other seasons, the animal's feed should have abundant vitamins A, B, C and D. They should have outdoor exercise every day, particularly on sunshiny days. In late fall or early winter, vaccination with a bacterin composed of chemically-killed bacteria most usually associated with Equine Influenza should increase the resistance of the animals against these organisms and aid in preventing the disease.

The organisms most commonly found associated with the condition known as Equine

Influenza are pyogenic Streptococci, Escherichia coli, Pasteurella equiseptica (bollingeri), and Staphylococci, both albus and aureus.

FRANKLIN MIXED BACTERIN (EQUINE) FORMULA 1

This formula consists of chemically-killed bacteria originally recovered from infections in horses.



Streptococcus (pyogenic) 30%
Escherichia coli 20%
Pasteurella equiseptica ...30%
Staphylococcus albus10%
Staphylococcus aureus ...10%

Uses: As an aid in preventing conditions attributed to the organisms named in the formula.

Dosage: For healthy animals, 2cc. Using aseptic precautions, inject under the skin prior to the season when such infections may occur. A second dose, double or more, in 3 to 4 days, should increase the initial effect.

Price: 20cc. bottle (10 normal doses), \$1.10.

Quantity prices on 100 doses or more.

FRANKLIN BOT CAPSULES

Gelatine capsules containing carbon disulphide, for eliminating Bot and Stomach Worms from horses and mules.

For best results, horses should be treated for bots about 30 days after the first freeze severe enough to kill all botflies that are on the wing. For stomach and round worms, treatment should be administered as indicated by condition of the animal. One 6-dram capsule is a dose for horses or mules weighing over 800 pounds; one 3-dram capsule is dose for animals under 800 pounds.

Prices: Colt Size, can of six 3-dram capsules, \$1.35; can of twelve 3-dram capsules, \$1.95; Adult Size, can of six 6-dram capsules, \$1.50; twelve cans of six 6-dram capsules, \$16.50.

Note: Bot Capsules must be shipped by express or by means other than parcel post, due to inflammable nature.

NAVEL ILL

On some breeding farms the disease occurs regularly and often complicates the raising of colts. It is thought the infection may be prenatal. However, it is generally considered that the infection enters the navel at time of birth or shortly thereafter. In order to guard against the possibility of navel infection of the newborn colt, foaling quarters must be kept sanitary and thoroughly disinfected. The navel cord should be clipped about one inch from the body. The stump should be massaged outward from the body to remove any blood clots. The cord should then be immediately painted with tincture of iodine, followed by an application of a dry antiseptic dusting powder. One method that is practiced is giving the pregnant mare at three to five day intervals (a sufficient time to acquire increased resistance before foaling) two or three large doses of bacterin containing the bacteria usually found in these cases. It is common practice to give the foal a half to full dose, depending on the size and apparent vigor, as soon as possible after birth. This may be followed on the third to fifth day by another dose of half again as much. One should not rely on the vaccination alone.

The organisms commonly associated with the condition known as Navel Ill are Streptococci (pyogenic), *Salmonella abortivoequinus*, *Escherichia coli*, *Staphylococcus albus* and *Staphylococcus aureus*.

FRANKLIN MIXED BACTERIN (EQUINE) FORMULA 2

This formula consists of chemically-killed bacteria originally recovered from colts and horses.

Streptococcus (pyogenic)	30%
Salmonella abortivoequinus	30%
<i>Escherichia coli</i>	20%
<i>Staphylococcus albus</i>	10%
<i>Staphylococcus aureus</i>	10%

Uses: As an aid in preventing conditions attributed to the organisms named in the formula.

Dosage: For prefoaling vaccination of mares, 2cc., aseptically injected under the skin a sufficient time prior to foaling to allow increased resistance to develop before parturition. For colts, 1 to 2 cc depending on size and vigor, aseptically injected under

the skin, as soon after birth as possible. A second dose, double or more, in 3 to 5 days should increase the initial effect.

Price: 20-cc. bottle (10 normal doses), \$1.10.

EQUINE ENCEPHALOMYELITIS SLEEPING SICKNESS OF HORSES

Encephalomyelitis is a disease of horses and mules caused by a filterable virus, which attacks the brain and spinal cord, causing irreparable damage and, in a high percentage of cases, death. Summer and early fall finds the highest incidence of the disease, which is considered to be spread by mosquitoes and other biting insects.

The onset of the disease is characterized by a rising temperature with a degree of dullness, increasing as the disease progresses. Staggering gait, sleepiness, difficulty in chewing and swallowing or inattention to food and water are typical symptoms. Paralysis may result, with an animal leaning against a stationary object for support, or, on getting down, an inability to arise.

Vaccination with Encephalomyelitis Vaccine (Chick-Embryo origin) is the only practical method of control, although a program of control of insects might lessen the incidence of the disease. Encephalomyelitis Vaccine should be administered in the spring or early summer, in two doses 7 to 10 days apart.

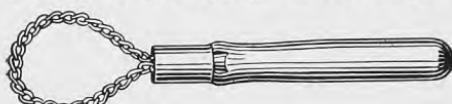
EQUINE ENCEPHALOMYELITIS VACCINE (CHICK-EMBRYO ORIGIN)

Available in 1 cc. vials. Complete treatment consists of two 1 cc. doses. **CANNOT BE RETURNED FOR CREDIT OR EXCHANGE.**

Dosage: 1 cc. injected intradermally (with aseptic precautions) followed by a second 1 cc. dose in 7 to 10 days.

Write for prices and availability.

FRANKLIN HORSE TWITCH



To aid in handling unruly horses. Hardwood handle, with nickel-plated chain and metal fitting. **\$2.00.**

FIRST-AID TREATMENT FOR LIVESTOCK

Prompt treatment of cuts, abrasions, snags, and other wounds of livestock is important if infections and resulting complications are to be avoided or overcome.

Preliminary treatment should include thorough cleansing of the wound or area to be treated. If the wound has become infected, it is best to first remove pus and other foreign matter—thorough flushing with Hydrogen Peroxide will in most cases adequately free the wound of this material. The next step should be to remove any foreign material of solid nature, such as splinters, gravel, etc. The wound should then be thoroughly cleansed with mild soap and warm water to which a reliable antiseptic has been added, followed by application of a suitable medicated dressing. The wound should receive frequent attention until it has healed.

In the following section you will find listed many Franklin preparations which are recommended for various uses in this respect.

FRANKLIN WIRE CUT LINIMENT

For use on cuts and abrasions caused by barbed wire, horn gouges, brush snags, etc.

Cleanse wound thoroughly with mild soap and warm water, to which a reliable antiseptic such as Franklin Cresolis has been added. Apply Franklin Wire Cut Liniment freely. Repeat the procedure as often as necessary.

Prompt use of Franklin Wire Cut Liniment will greatly reduce chances for infection and hasten healing.

Price: 16 oz. can, **\$1.25.**

CAMPHOR IN OIL

A sterile solution of Camphor in Oil is commonly used in conditions characterized by cardiac and respiratory weakness, such as chilling, heat stroke, and heat exhaustion. Each 10cc. contains not less than 2.15 grams of Gum Camphor in a refined cottonseed oil base. Dosage: Horses and cattle, 20 to 30cc.; small animals, 5 to 10cc. Administered by intramuscular injection. Price: 120cc. bottle **\$1.35.** Postage extra.

DOUBLE SULFA OINTMENT

Contains 5% Sulfanilamide and 5% Sulfathiazole in suitable ointment base. For use on cuts and abrasions, as well as other wounds in livestock, where a need for Sulfanilamide or Sulfathiazole is indicated. Best results are obtained by first cleansing the area to be treated with mild soap and warm water to which Franklin Cresolis has been added, and cutting away



dead or damaged tissue which may prevent proper contact of the ointment with live tissue; then apply Double Sulfa Ointment freely. Whenever possible or practical, treated area should be bandaged to hold ointment in close contact with tissues. Repeat the procedure as often as necessary. Prices: 2-ounce jar, **80c.**; 1-lb. jar, **\$3.75.**

FRANKLIN GALL LOTION

QUICK DRYING
CONTAINS GENTIAN VIOLET

For treatment of galls, ringworm, scabies, wire cuts, and skin abrasions of livestock.



Cleanse the area thoroughly with warm water to which a reliable antiseptic, such as Franklin Cresolis, has been added. Apply Franklin Gall Lotion freely. Repeat the procedure as often as necessary.

Each bottle of Franklin Gall Lotion is complete with applicator. Price, 4 oz. bottle, **75c.**

FRANKLIN FOOT ROT TREATMENT

For treatment of simple foot rot in sheep, cattle, and hogs.

After thoroughly cleansing affected area, remove scabs, crusts, and rotted tissue. Apply Franklin Foot Rot Treatment full strength with brush or swab, taking care to cover all affected tissue.

Franklin Foot Rot Treatment may also be used for treating simple lip ulcers, harness galls, and minor wounds where the use of a slow-drying form of dressing is desirable. Prices: 4-ounce, **\$1.00**; 16 oz., **\$2.70.**



FRANKLIN MINERAL OIL

A pure mineral oil of proper type for rapid effect on livestock.

Price—

Quarts	\$1.00
Gallons	3.00
5 gals., per gal.	2.80
Drum lots, per	
gallon	2.00



COLIC CAPSULES

For the relief of Flatulent Colic in horses and cattle. Capsule form facilitates administration.

Ingredients act as a carminative to expel excess gas, and as a stimulant to gastrointestinal tract.

Dosage: Horses, one capsule, to be repeated in an hour if necessary; cattle one or two capsules to be repeated in an hour if necessary.

Treatment should be followed by administration of a purgative to remove disturbing contents of the stomach. Packaged six capsules to a box. Price: Per box **\$1.35**.

FRANKLIN BLISTOL

A blistering agent for use on livestock to set up an inflammatory process in the part to be treated, thus stimulating it to continue the work of healing and repair.

Franklin Blistol is indicated in the treatment of chronic inflammations of muscles, joints, etc., of livestock; for spavin and ringbone of horses. It may be used lightly over swellings from sprains and for strained tendons. In general, the

use of a strong blistering agent such as Blistol, should not be used on acute swellings and inflammations, or on such conditions covering a wide area, but should be confined to those chronic conditions requir-



ing a strong counterirritant on a small, confined surface.

The active ingredients—Red Iodide of Mercury, Cantharides, and Turpentine—are recognized agents for use in such cases.

Price: 2-ounce jar, **95c.**

FRANKLIN IODIZED OIL

Franklin Iodized Oil is an antiseptic, stimulating wound dressing particularly adapted for the treatment of abscesses and deeper wounds. Under such circumstances, it carries the beneficial qualities of iodine without the irritating effect.

In the treatment of abscesses, the affected area should first be lanced in two places—at the upper and lower edges—for removal of pus and to allow for drainage. The wound should then be thoroughly irrigated with Franklin Iodized Oil, using a metal syringe with 6-inch irrigating pipe attached.

Externally, Franklin Iodized Oil may be applied to sore or strained muscles as a stimulative lotion, as well as to cuts and abrasions.

Cleanse open wounds, then apply Iodized Oil generously, contacting all affected parts. A compress made of sterile gauze saturated with Iodized Oil may be applied and held in place by bandaging if desired or practical.

Animals which usually fight the application of medicants to such conditions as fistula, seem to welcome the application of Iodized Oil because of its soothing effect to the painful area.

Prices: 4-ounce, **\$1.00**; 1-pint, **\$3.00**.

FRANKLIN STIM LINIMENT

Franklin Stim Liniment is a reliable, old time stimulating liniment for local application in bathing and massaging strained or sore muscles.

Stim Liniment is particularly adapted for use on track animals. Likewise, it is beneficial for human use, especially as a rub for athletes. Its penetrating action, together with the benefits of deep massage, make this liniment an outstanding product in the line.

Price: 8-ounce bottle, **\$1.50.**



MIXED INFECTIONS IN SHEEP

Hemorrhagic Septicemia, complicated with other associated infections involving the respiratory organs and often the intestinal tract, is common in sheep. Such conditions occur most frequently when lambs or sheep are taken from their accustomed ranges, crowded together in cars, and exposed to the rigors of shipment, such as prolonged hunger and thirst, complete change of feed and often exposure to radical weather changes while in transit, all of which are contributing factors to their arrival at destination in a weakened and exhausted condition. Their reduced vitality and lowered resistance to disease provides favorable conditions for development of infections.

These infections, however, are not confined to animals exposed in shipping, but also develop in flocks on home ranges, generally during winter and early spring.

Symptoms
Fever, pronounced dullness, rapid or difficult breathing, loss of appetite, muscular trembling, coughing and discharge from the nose and eyes are the most pronounced symptoms. In the intestinal form diarrhea develops.

Prevention and Control

Proper resting, feeding and watering before shipment and while in transit, avoidance of overcrowding, protection against severe weather and vaccination for increasing resistance to infection by hemorrhagic septicemia and certain other organisms so frequently associated with hemorrhagic septicemia, are all helpful aids in the prevention of such conditions in sheep.

Vaccination should preferably be 10 days to 2 weeks previous to shipment, weaning, or other unusual exposure, such as radical changes in feed or severe weather. However, pre-shipment vaccination should not be omitted even if less than a 10-day period remains.

The organisms named in the formula of Franklin Mixed Bacterin (Ovine) are the ones most frequently associated with infections in sheep; therefore, such product is recommended as an aid in the control of infections in which organisms represented in the formula are associated.



FRANKLIN MIXED BACTERIN (OVINE)

Consists of killed bacteria (including hemorrhagic septicemia organisms) isolated from infections in sheep, as follows:

Pasteurella Oviseptica 30%
Corynebacteria 30%
Salmonella Schotmulleri 20%
Staphylococcus:

Albus 10%
Aureus 10%

Uses: To aid in controlling infections in which the above organisms are involved.

Dosage: For healthy animals, 1 cc. Using aseptic precautions, inject under the skin prior to the season in which such infections may occur. A second dose, double or more, in 3 to 5 days should increase the initial effect.

Price: 10 cc. bottle (10 normal doses), **90c**; 50 cc. bottle (50 normal doses) **\$4.50**.

SHEEP BELLS



No. 631 — GENUINE LONG DISTANCE

Made from one piece of metal, no riveting. Smooth, clear tone.

Size No.	Per Doz.	Size of Bell	Wt. Lbs. Per Doz.
8	\$ 4.20	2 1/8 x 1 1/2 x 1 5/8	2 1/2
9	5.70	2 5/8 x 2 x 2	3 1/4
10	6.80	3 x 2 1/4	5
11	8.10	3 1/2 x 2 5/8 x 3 5/8	7
014	13.50	5 x 3 3/4 x 4 1/2	15 1/4

No. 403 — ROUND PATTERN

5	\$ 4.35	2 1/2	1 3/4
7	7.15	3 3/8	4 1/2

LEATHER STRAPS

For bells listed above. Size, 7/8 x 26 inches. Price: **50c**.

LAMB NIPPLES

Made of black gum rubber, sufficiently rigid to instantly recover after being collapsed by sucking action. Fits neck of ordinary bottle. Price, **10c** each or **\$1.00** per dozen.



MIXED INFECTIONS in SWINE

Mixed infections in swine are not uncommon and may be classed in a general way as of two common types, one of which is an involvement of the respiratory organs and is usually associated with Hemorrhagic Septicemia (Swine Plague).

The organisms most frequently found associated with lung infections in hogs are Pasteurella suisepitica (suilla), Salmonella cholerasuis, pyogenic Streptococci, and Corynebacteria.

The other form of infection involves the intestinal tract and somewhat simulates Hog Cholera in general symptoms and appearance.

The organisms most commonly found associated in infections of the intestinal tract of swine are Salmonella cholerasuis, Salmonella scotmulleri, Escherichia coli, and Pasteurella suisepitica (suilla).

FRANKLIN MIXED BACTERIN (PORCINE) FORMULA 1

This formula consists of chemically killed bacteria recovered from infections in swine as follows:

Pasteurella suisepitica	30%
Salmonella cholerasuis	30%
Streptococcus (Pyogenic)	20%
Corynebacteria	20%

Uses: To aid in controlling infections in which above organisms are involved.

Dosage: For healthy swine, 1 cc. Using aseptic precautions, inject under the skin prior to the time such infections may occur. A second dose, double or more, in 3 to 5 days should increase the initial effect.

Price: 10cc. bottle (10 normal doses), **90c.**; 50 cc. bottle (50 normal doses) **\$4.50.**

FRANKLIN MIXED BACTERIN (PORCINE) FORMULA 2

This formula consists of chemically killed bacteria recovered from infections in swine, as follows:

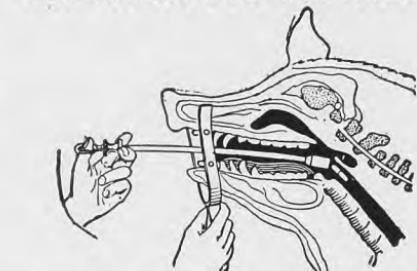
Salmonella cholerasuis	30%
Salmonella scotmulleri	30%
Escherichia coli	10%
Streptococcus (Pyogenic)	10%
Pasteurella suisepitica	20%

Uses: To aid in controlling infections in which the above organisms are involved.

Dosage: For healthy swine, 1 cc. Using aseptic precautions, inject under the skin prior to the time such infections may occur. A second dose, double or more, in 3 to 5 days should increase the initial effect.

Price: 10cc. bottle (10 normal doses), **90c.**; 50 cc. bottle (50 normal doses) **\$4.50.**

FRANKLIN PIG CAPSULES



Hogs are seldom free from worms. These hinder growth and thriftiness and make the animals susceptible to many diseases.

In combination with effective cathartics to carry off the killed worms, Franklin Pig Capsules contain Oil of Chenopodium, Aloin, and Calomel to give effective results in removing large intestinal round worms from pigs.

Dosage: One capsule for pigs from 25 to 50 pounds weight; two capsules for pigs from 50 to 100 pounds; three capsules for pigs over 100 pounds.

Franklin Pig Capsules are prepared for administering with a balling gun or capsule forceps. They eliminate the heavy transportation costs of liquid preparations.

Herd treatment, while easy to administer, is never so effective as individual treatment. In individual treatment, no animal is missed and each animal is given a proper dose.

Price: 100 capsules, **\$9.00**; 50 capsules, **\$4.95**; 25 capsules **\$2.70.**

FRANKLIN HOG HOLDER



Sometimes known as the "Iowa Hog Holder." 24-inch shaft of tubular steel with 21-inch loop of airplane cable. Has additional use in obstetrical work. **\$5.00.**

SWINE ERYSIPELAS

Swine Erysipelas is an infectious disease of swine caused by the germ, *Erysipelothrix Rhusoopathiae*. As a rule this disease occurs principally in the field in three forms: (1) The acute septicemic form, (2) the chronic form and (3) a very mild form commonly referred to as Diamond Skin Disease.

At the present time the acute septicemic form seems to occur more often than the other forms. This form causes the heaviest losses, particularly in pigs. Affected animals suddenly appear ill. Temperatures are extremely high in the early stages. The skin may show red discolorations, very noticeable in white haired animals. Death may occur within a few days after symptoms are noticed.

The chronic form of the disease is more prolonged but also causes considerable losses. Affected animals may manifest difficult breathing, swollen joints associated with considerable soreness and stiffness, causing a tendency to walk on the toes. The skin may be reddish-purple in color.

The principal symptoms noted in the mild form are reddish, diamond shaped eruptions (Diamond Skin Disease). The losses in this form of the disease are very low.

SWINE-ERYSIPELAS SERUM

Anti-Swine-Erysipelas Serum produces a high degree of protective immunity lasting, under usual field conditions, for approximately two weeks. Animals having the disease or coming in contact with it within two weeks after receiving the proper serum dosage may develop some degree of active immunity lasting, at times, for a considerably longer period. Outbreaks of the disease are usually promptly checked following the administration of the proper serum dosage, and exposed animals usually protected.

Dosage: For Prevention—Pigs up to 70 pounds, 3 to 5 cc.; 70 to 150 pounds, 10 cc.; 150 pounds and over, 10 to 20cc.

Treatment: At least double the prevention dosage, repeated at 24-hour intervals as needed. Inject dosage in axillary space.

Price: 250-cc. vial, \$8.95; 100-cc. vial, \$4.75; 50-cc. vial, \$2.50.

PREPVENT ANAEMIA AND NUTRITIONAL SCOURS IN YOUNG PIGS

— with — IRON-EZE

Save your young pigs. Give them IRON-EZE, new liquid Iron and Vitamin concentrate. It prevents and treats early nutritional deficiencies that cause Anaemia and Enteritis. IRON-EZE supplies vital iron in a quickly absorbed, non-irritant, non-toxic form. One dose provides a young pig's weekly requirements of Vitamin B1, Riboflavin, Niacin, Pyridoxine and Pantothenic Acid.

New easy to administer "squeeze-it" plastic sprayer bottle makes treatment simple and easy.

120 Dose Bottle \$1.50



CREOLIN DISINFECTANT

The original and only genuine CREOLIN made by Pearson's Antiseptic Company of Canada Limited.

An ideal disinfectant for everyday use on the farm, because it is safe, non-poisonous, non-caustic.

CREOLIN is free from carbolic acid but is many times more effective against disease germs.

Prices: 4 ounces, 30c; 8 ozs., 55c; 16 ozs., 95c; 40 ozs., \$1.85; 160 ozs., \$5.25.

REX WHEAT GERM OIL

Rex Oil is a very complex, biochemical material, supplying in a highly concentrated form the oil soluble, fresh feed factors present in Wheat Embryo and essential to normal reproduction.

By feeding Rex Oil regularly you assure an abundant supply of the essential factors frequently lacking in stored feeds due to their oxidation and loss.

Rex Oil prevents and corrects many of the common non-organic breeding disorders which complicate the profitable raising of livestock, fur bearing animals and poultry.

Prices: 4-ounce bottle, \$1.25; 10 oz. tin, \$2.80; 1 pint, \$5.00; 1 quart, \$8.00; 1 gallon, \$29.00; 5 gallons, \$125.00.



MIXED INFECTIONS IN POULTRY

Where any considerable number of poultry are brought together on limited ground, disease is certain to appear among them sooner or later. The greater the number of poultry kept on any given area, other things being equal, the sooner disease will appear, the more rapidly it will spread, and the greater will be the loss from it.

Every intelligent effort should be made to prevent or delay the appearance of disease in a flock and every effort should be made to limit its spread and eradicate it. These sanitary efforts are usually spoken of as a preventive measure. Those measures directed at curing or alleviating their suffering come under the head of therapeutics or therapy. We are concerned here with preventive measures.

Mixed bacterial infections occur in poultry. Mixed infections in poultry are much more common in unsanitary surroundings than they are in strictly sanitary surroundings. For this reason all those measures which will prevent the appearance of the disease or increase the ability of the fowls to resist its attack are of the utmost importance. Hence, the site for the poultry plant, the construction, arrangement and care of the buildings, water and an adequate food supply, periodic disinfection of the entire poultry plant, constant inspection of the flock to detect incipient disease, as well as immediate disposal of all sick and dead fowls are elementary precautions that will pay big dividends. Likewise, preventive vaccination against specific as well as non-specific infections is as essential as sanitation because if vaccination is performed in time, the resistance of the flock should be much better able to throw off any infection than if the flock has not been so vaccinated.

The organisms most frequently found in such mixed infections are Pasteurella aviseptica (avicida), Streptococci (non-pyogenic), Pseudomonas aeruginosa, and Staphylococcus albus and aureus in chickens and turkeys. The use of bacterins made from these organisms as preventive agents should increase the resistance of the fowls if used prior to the season when such infections may occur.



FRANKLIN MIXED BACTERIN (AVIAN) CHICKEN FORMULA

This formula consists of chemically killed bacteria identified with typical infections in chickens.

Pasteurella Aviseptica	25%
Streptococcus (non-hemolytic)	25%
Pseudomonas Aeruginosa	25%
Staphylococcus Albus	12.5%
Staphylococcus Aureus	12.5%

Uses: To aid in controlling infections in which above organisms are involved.

Dosage: Normal dose, 1 cc. A second increased dose, double or more, in 3 or 4 days should increase the resistance against these organisms. The stimulation of antibodies against such organisms is encouraged by injection of the killed bacteria.

Price: 50-cc. bottle, **\$1.25**; 100-cc. bottle, **\$2.25**; 250-cc. bottle, **\$5.00**.

TURKEY FORMULA

This formula consists of chemically killed bacteria recovered from typical infections in turkeys.

Pasteurella Aviseptica	40%
Shigella Gallinarum	40%
Staphylococcus Albus	5%
Staphylococcus Aureus	5%
Pseudomonas Aeruginosa	10%

Uses: To aid in controlling infections in which the above organisms are involved.

Dosage: For pouls, 1 cc. For large birds, 1½ to 2 cc. A second dose, double or more in 3 to 4 days should increase resistance against these organisms.

Price: 50-cc. bottle, **\$1.25**; 100 cc. bottle, **\$2.25**; 250 cc. bottle, **\$5.00**.

POSTAGE

Please note, prices on vaccines are **postage paid**. All other items are priced **F.O.B. Calgary**. Your local dealer's prices will therefore, be a little higher than catalogue prices, to allow for postage. If there is no Franklin dealer in your district, be sure to include extra for postage when ordering direct. Any surplus will be returned.

FRANKLIN AVISEPTICUS-GALLINARUM BACTERIN

This formula consists of chemically killed bacteria recovered from typical infections of fowl cholera and typhoid in poultry as follows:

Pasteurella
Avisepica 50%
Shigella Gallinarum 50%

For aiding in the prevention of fowl cholera (a vi a n hemorrhagic septicemia) and fowl typhoid (infectious leucemia) occurring either singly or associated in the same flock.

Dosage: Normal dose for chickens, 1 cc.; turkeys and geese, 2 cc. A second dose, double or more, in 3 to 4 days, should increase resistance against these organisms.

Price: 50-cc. bottle, **\$1.25**; 100-cc. bottle **\$2.25**; 250-cc. bottle, **\$5.00**.

DON'T FEED WORMS!
PROTECT YOUR POULTRY PROFITS with

PHENO-NIC TABLETS

Safely Kill ROUND and CAECAL Worms

Egg production suffers when round worms rob birds of nourishment, limit growth, irritate mucous linings and lower resistance to disease. Caecal worms may cause spread of Blackhead when resistance is lowered.

Pheno-Nic Tablets provide Phenothiazine and Nicotine in correct amounts to completely destroy these parasites.

Try Pheno-Nic Tablets, the positive way to completely rid your flock of worms.

Prices:

Bottle of 100 Tablets	.....	\$ 1.50
Bottle of 500 Tablets	.....	6.75
Bottle of 1000 Tablets	.....	12.00

CAPONIZING OUTFITS

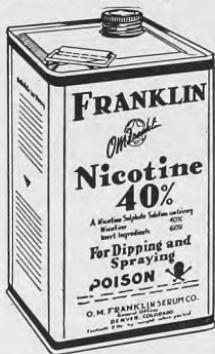
Capon's bring increased prices. Caponize your young cockerels with this improved caponizing outfit. Easy to do your own work at a very minimum cost. Our outfit includes sheet of instructions and all instruments necessary for use.

Price: **\$4.00**.



FRANKLIN NICOTINE 40%

The use of Nicotine 40% in official dipping is authorized by the U.S. Bureau of Animal Industry.



A nicotine sulphate solution containing 40% nicotine, 60% inert ingredients.

Kills scabies, sheep ticks and lice on sheep, cattle, hogs, goats and poultry. A proven nicotine dip. Officially recognized. A tested, proven and dependable treatment for controlling lice on poultry as well as a popular dip for cattle, sheep and hogs.

Also effective for use in spraying plants, orchards, or gardens for most aphids, thrips and leaf hoppers.

Prices: 10-pound tin, **\$13.25**; 5-lb. tin, **\$7.50**; 1-pound bottle, **\$2.35**; 5-ounce bottle, **\$1.05**. 1 1/4-ounce bottle, **45c** each.

Prices subject to change without notice.

VI-OXALINE (SULFAQUINOXALINE) LIQUID CONCENTRATE

FOR TREATMENT OF AVIAN COCCIDIOSIS

Vi-Oxaline is sulfaquinoxaline sodium in a new, easy-to-use, soluble form.

The outstanding characteristic of Vi-Oxaline is its ability to act as a preventative in assisting chickens and turkeys to establish immunity to all types of coccidiosis BEFORE THE DISEASE STRIKES.

While Vi-Oxaline is also effective in the control of mild outbreaks of coccidiosis, preventative treatment is the preferred treatment.

EASY TO USE

Simply mix with drinking water according to label directions.

ECONOMICAL

It costs but 1c to 3c per bird, dependent on age to effectively prevent or control coccidiosis.

Prices:

4 ounces, each	.....	\$ 1.25
16 ounces, each	.....	3.50
32 ounces, each	.....	6.00
80 ounces, each	.....	14.00

Get Rid of CATTLE GRUBS



WARBLE TREATMENTS

FOR DESTRUCTION OF CATTLE GRUBS (OX WARBLES)

It is estimated by the U.S. Department of Agriculture that the total loss from reduced beef and milk production, due to cattle grubs, is from fifty to one hundred million dollars per year, which, added to the estimated loss in damaged hides of fifteen to twenty million dollars, presents a staggering figure.

This loss can be prevented by treatment of animals when the grubs reach the back, boring a hole through the hide. The grub can be killed at this stage of its life cycle by application of Rotenone-bearing powders in dry form or prepared wash form, or in spray form at about 250 to 400 pounds nozzle pressure. The treatment should be repeated at about thirty-day intervals, as all grubs do not reach the back at the same time.

By killing the grub while in the back, heel fly attacks can be eliminated in the spring with consequent reduction in grub infestation the following year. It has been demonstrated that grub infestation can be largely eliminated through the area-wide treatment of cattle in a given area.

Franklin offers two forms of Warble Treatment: WASH FORM for scrubbing; POWDER for use in preparing a spray solution. Each designed to the convenience of the user.

PRICES:

Warble Treatment (Wash Form):

Mix with water and apply with brush.

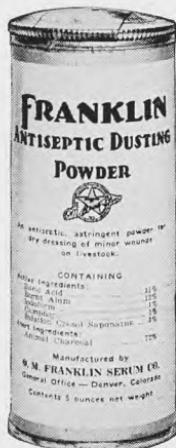
1-pound package Chipman or C.I.L. ...75c
(Enough for about 20 head)

Warble Treatment for Power Sprays

Government approved formula, Chipman, 15-lb. bags, makes 80 gals. of spray, each, \$4.69.

C.I.L., 4 pound bags, each\$1.25
(Makes about 20 gals. of spray liquid.)

NOTE: See page 45 for prices and complete description of the MAASDAM POW'R-PULL, the tool which may be used as a wire stretcher, stump puller, hoist, to bind loads on truck, and to move heavy objects where controlled power and ease of operation is essential.



FRANKLIN ANTISEPTIC DUSTING POWDER

Antiseptic dry dressing for open wounds on all livestock. Excellent for minor cuts and abrasions. Easy to shake on. It is antiseptic, astringent and absorbent. Much superior to ordinary alum powders. Where possible, wound should be cleansed thoroughly with weak tincture of Franklin Cresolis. Then apply powder freely once or twice daily.

Price: 5-ounce shaker-top can, 75c.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN PHENOTHIAZINE

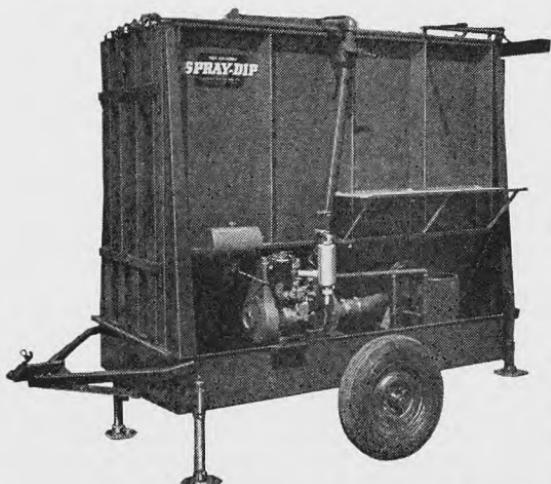
Phenothiazine is a synthetic chemical intended for the removal of intestinal parasites from livestock. Although effective against certain parasites in horses, cattle, swine and poultry, it is used primarily for worming sheep and goats, in which animals it is effective against the common stomach worm, the lesser stomach worm, bankrupt worm, hookworm, large-mouthed bowel worm, and nodular worm. Less effective against thread-necked strongyles, whipworm, and cooperia worms. Ineffective against cappilarids, liver flukes, following dosage:

Franklin Phenothiazine is packaged in three forms for convenience in use: Drench, Bolus, and Powder. For use in sheep and goats, Phenothiazine should be used in the following dosage:

Animals weighing over 50 lbs. 25 grams
Animals weighing under 50 lbs., 12½ grams

PHENOTHIAZINE POWDER

May be mixed with feed in proper ratio to provide each animal a normal dose, or with water to make a semi-liquid drench in the proper ratio to provide 12½ grams per fluid ounce of mixture. May be also used in a ration of 1 pound to 10 pounds of salt



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(following worming) to lessen re-infestation. Note: For use in calculating dosage, one ounce by weight of Franklin Phenothiazine Powder equals approximately 28½ grams.

1-lb. package	\$ 1.80
5-lb. package	8.55
25-lb. package	40.50
150-lb. drum, per pound	1.20

PHENOTHIAZINE BOLUSES

Each bolus contains 12½ grams Phenothiazine. Box of 50 \$3.60

FRANKLIN STOCK DIP AND DISINFECTANT

(PHENOL CO-EFFICIENT 5)
FOR GENERAL FARM AND HOME SANITATION



A concentrated dip and disinfectant of high quality, suitable for all-round farm and home use. It is a coal-tar derivative having excellent parasitic germicidal and disinfecting qualities.

20 oz. tins, each	\$.50
40 oz. tins, each	.90
1 gal. tin, each	2.70
5 gal. tins, each	12.60
45 gal. drums, per gallon	1.75

BIGGER LIVESTOCK GAINS AND PROFITS CAN BE YOURS . . .

With the new Economy Model
SPRAY-DIP

Fast, Easy, Thorough and so Economical!

Complete, thorough control of all external parasites is saving Spray-Dip owners thousands of dollars each year in extra beef pounds saved.

The driving spray from 27 strategically located nozzles wets to the hide every part of the animal's body, including the hard to reach underneath areas. This thorough saturation of the animal is the secret of the Spray-Dip's success in eliminating lice, ticks, grubs, flies and even sarcoptic scab, which is one of the most difficult of all external parasites to control.

Write for free booklet with spraying chart which gives the costs and profits resulting from treating herds of different sizes by this complete method. Determine for yourself how much you could expect to profit from Spray-Dipping your own herd.

INSECTICIDE POWDER



A dusting powder containing 10% DDT for dry application to animals and poultry for the control of fleas, ticks, and lice. Equally effective against roaches and bedbugs. Application may be repeated as often as necessary.

Price: 1 pound with pyrethrum, **75c**; without pyrethrum, 2 pounds, **75c**.

FLY SPRAY (CONCENTRATE)

25% DDT

Contains 25% DDT in emulsifying oil base. To be used in the preparation of a water emulsion for spraying on livestock for the control of horn flies, fleas, lice, and sheep ticks. Also may be used for spraying barns, sheds or houses for residual action against house flies and mosquitoes. One part Fly Spray (Concentrate) added to four parts water (non-alkaline) gives an emulsion containing a 5% concentration of DDT.

Price: Pint, **\$1.00**; quart, **\$2.00**; gallon, **\$6.00**.

DIP POWDER

50% DDT



A water miscible powder containing 50% DDT for the preparation of a dip or a spray for the control of lice, ticks, fleas, flies, and mosquitoes on animals. One pound added to five quarts of water gives a prepared mixture containing 5% DDT. Mixture may be used in vat, spray gun, or applied by hand with sponge, cloth, or brush.

May also be used for spraying barns or sheds for residual action.

Price: 2 lbs., **\$1.00**; 4 pounds, **\$1.60**; Case of 12 4-lb. packages, **\$19.00**; 50 lbs., **\$18.65**.

FLY SPRAY

(For Household Use)

5% DDT WITH PYRETHRINS

Contains 5% DDT and 0.04% Pyrethrins in a base of Petroleum and Solvent Oils. Pyrethrins for quick knock-down and kill and DDT for long-lasting residual kill of flies, fleas, gnats, and mosquitoes. Avoid use where useful insects, such as honey bees, will contact. Use in undiluted form as a space spray or for direct application to walls, ceilings, floor and other surfaces. Not recommended for use on animals, household pets, or human beings.

Price: 8 oz., **29c**; 16 oz., **50c**; 32 oz., **85c**; 1 gal., **\$3.50**; 5 gal. tins, each, **\$13.75**.

BARN SPRAY

5% DDT IN KEROSENE BASE

Price: Gallon, **\$2.50**.

CAUTION

DDT products listed on this page should not be used on dairy cattle or animals being finished for slaughter, or in dairy barns, milk sheds, or poultry houses.

LIVESTOCK SPRAY

LIQUID LIVESTOCK SPRAY, containing both a killer and a repellent, is ideal for the dairy farmer. It gets rid of flies and other annoying pests in double-quick time. Daily applications will build up a residual effect that will last over the full 24-hour period or longer.

Contains activated Pyrethrum in a special new form for quick knock-down and repellency. Chlordane for complete kill.

Apply with either a cloth or sprayer to the flanks, necks, etc., of livestock. The hair should be dampened but not wet.

1 gallon can, each **\$2.25**

FLY REPELLENT

33 1/3% INDALONE

A solution containing 33 1/3% Indalone for application to animals to repel horn flies, gnats, and mosquitoes. Can be applied with ordinary spray gun or with a cloth saturated with the preparation. Application may be repeated as often as necessary. This preparation may be used for human application with equal benefit.

Price: Pint, **\$1.20**; gallon, **\$6.00**.

RED WATER DISEASE

Red Water Disease (Hemorrhagic Disease, Bacillary Hemoglobinuria) is a highly fatal disease caused by the anaerobe, Clostridium Hemolyticum. Serious losses among cattle and sheep are caused each year in irrigated pastures and poorly drained valley ranges. Chiefly it is considered of geographical importance in valley areas of the Sierra Nevadas, Pacific Coast, Gulf Coast, and the southern states.

The disease develops rapidly, characterized by temperatures varying from 104 to 106°F.; loss of appetite, labored breathing, drop of milk production. The principal symptom is a dark, port wine-colored urine and occasionally hemorrhages from the bowels. Animals may die within 24 to 36 hours after symptoms are noted, with the death rate among infected animals reaching 90%. Animals of all ages may become infected. Post mortem examination generally reveals bloody discharges from natural body openings; many hemorrhages on the serous membranes of the chest and abdomen; one or more areas of dead tissue in the liver; swollen kidneys and port wine-colored urine.

Vaccination is the only practical method of control of Red Water Disease. Franklin Clostridium Hemolyticum Bacterin is produced in conformance with Bureau of Animal Industry regulations, and is offered in a concentrated dose which combines full effectiveness and potency with convenience of administration. For subcutaneous injection in a 5 cc. dose to cattle and a 2 cc. dose to sheep. Vaccination should be accomplished at least two weeks prior to the season when death losses are known to occur, or before animals are pastured on infected land. Animals which are to be grazed the year around on infected pastures should be re-vaccinated at 6-month intervals.

CLOSTRIDIUM HEMOLYTICUM BACTERIN

For the prevention of Red Water Disease (Hemorrhagic Disease, Bacillary Hemoglobinuria).

Available in 25-cc. and 50-cc. bottles. Price per 5-cc. dose, **25c.** Less in quantities. For more complete information, see your Franklin dealer or write to nearest Franklin branch office.

METHOXYCHLOR (C.I.L.)

For the control of flies on dairy cattle and in and around dairy buildings, offering both quick-killing and residual killing qualities. Methoxychlor possesses a low degree of toxicity toward warm-blooded animals and is entirely safe for this purpose.

For use on farm animals for control of hornflies, lice and fleas, mix 2 to 4 pounds of Methoxychlor 50% to 25 gallons of water, For use in farm buildings for control of stable flies, houseflies, mosquitoes, fleas, and cockroaches, use 1 pound of Methoxychlor 50% in 2½ to 3 gallons of water.

C.I.L. Methoxychlor 50% Wettable Powder in 1-lb. bags, each **\$1.40**

COOPER'S SHEEP DIPPING POWDER



Cooper's Dip kills all sheep ticks and lice with a single dipping and protects against fresh attacks for months.

All ticks, eggs or nits are dead the day after the dipping is done.

The small particles of Cooper's Dip remaining in the fleece keep the sheep clean. This often lasts from shearing to shearing. These particles kill ticks that get on the sheep after dipping.

This is an arsenical dip and may be used without danger, excepting with animals having open wounds.

No. 2 package makes 25 gallons **.95**

No. 8 package makes 100 gallons **3.75**

COOPER'S DRI-KIL

2 lb. tins, each	\$.75
10 lb. drums, each	3.50
25 lb. drums, each	7.75

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN SULFONAMIDES

The use of sulfonamides for treatment of various livestock diseases has become quite wide-spread during the past few years. Many diseases have been controlled through experimentation on certain types of bacteria, hence the great number of sulfonamides now available as science is able to develop them.

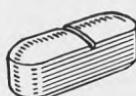
Sulfonamides act as bacteriostatic agents—interfering with the metabolism and multiplication of the organisms, holding them in check until they are overcome and destroyed by the natural body defence forces. For this reason, it is essential that treatment begin with a large dose, generally the size of the daily dose, to establish a high drug-level, and this level maintained through the use of smaller doses given at eight or twelve hour intervals. Smaller doses given at shorter intervals are to be preferred, but in most cases of livestock diseases, it is impractical to do so. As a general rule, dosage should be sufficient to reduce the temperature to as near a normal level as possible and administered often enough to maintain the temperature at this level.

It is important that the animal under-going treatment gets sufficient water, as dehydration of the animal is apt to result in kidney damage because of poor elimination of the sulfonamide. Should the animal fail to drink plenty of water, it should be administered by means of a drench or other method.

Sulfonamides are classified as dangerous drugs and should be administered under the supervision and direction of a veterinarian. Should the animal develop any untoward effects, treatment should be stopped immediately.

Sulfonamides are incompatible with drugs and feeds containing sulphur, which should be dispensed with during medication.

Franklin Sulfonamides are available in round, flat tablet shape, or in bolus shape, as illustrated below. Choice depends on the preference of the user.



Bolus shape, available in 60-grain for use with a 5 cc. Sheep or Swine Balling Gun, or in 240 grain for use with Equine Balling Gun.

SULFATHIAZOLE

Primarily effective against staphylococci and escherichia coli infections. Indicated as useful in the treatment of shipping fever and calf pneumonia.

DOSAGE

Large Animals: Give large initial dose of approximately 1 grain per pound of body weight followed at 8 hour intervals with doses of approximately $\frac{1}{2}$ grain per pound of body weight for three to four days, or until 24 hours after symptoms disappear.

Sulfathiazole Tablets or Boluses

25- 60 grain tablet or bolus	\$ 3.75
100- 60 grain tablet or bolus	13.50
500- 60 grain tablet or bolus	63.75
25-240 grain bolus only	13.50
50-240 grain bolus only	26.25



Round, flat tablet shape, available only in 60-grain, for use with the Equine Balling Gun.

SULFAPYRIDINE

Primarily effective in the treatment of acute *Actinomycetes Necrophorus* infections (calf diphtheria, foul-foot, etc.) in animals. Also considered of value in treatment of calf pneumonia.

DOSAGE

Large Animals: Initial dose of 1 grain per pound of body weight, followed by doses of approximately $\frac{1}{2}$ grain per pound of body weight at 12-hour intervals for three or four days.

Sulfapyridine Tablets or Boluses

25- 60 grain tablet or bolus	\$ 5.70
100- 60 grain tablet or bolus	21.00
500- 60 grain tablet or bolus	101.25
25-240 grain bolus only	20.70
50-240 grain bolus only	39.00

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SULFANILAMIDE

Primarily effective against infections in domestic animals caused by or complicated by hemolytic streptococcus, such as: Strangles (distemper) in horses; Navel III in foals; Joint III in calves; Metritis; Septicemia (blood infection) in horses and cattle.

DOSAGE

Large Animals: Give large initial dose of approximately 1 grain per pound of body weight, followed at 8-hour intervals with doses of 1/3 grain per pound of body weight for four days.

Sulfanilamide Tablets or Boluses

25- 60 grain tablet or bolus	\$ 1.95
100- 60 grain tablet or bolus	6.00
500- 60 grain tablet or bolus	24.75
25-240 grain bolus only	5.70
50-240 grain bolus only	10.95

TRI-SULFA-SOL

Franklin Tri-Sulfa-Sol, Veterinary, is an injectable triple-sulfa solution, each 100 cc. of which contains:



Sulfathiazole Sodium, 6 gm.; Sulfapyridine Sodium, 4 gm.; Sulfamerazine Sodium, 3 gm. An accurate diagnosis is essential for the safe and effective use of this product which is recommended for the treatment of bacterial infections which are susceptible to medication by sulfamerazine, sulfapyridine, or sulfathiazole. These include: Calf diphtheria and pneumonia, hemorrhagic septicemia (shipping fever), necrophorus infections including necrotic laryngitis and inter-digital phlegmon (foot rot), septicemias associated with metritis and mastitis, pasteurella pneumonia and necrophorus enteritis in swine, and secondary bacterial infections associated with distemper in dogs and cats.

Dosage: In most cases the initial dose will be 1 grain (1/2cc.) per pound of body weight (50cc. per 100 pounds). In some cases this may be increased to 2 grains (1cc.) per pound. A maximum initial dose should be given by parenteral, intravenous (very slowly), intra peritoneal, subcutaneous, or intramuscular injection. This maximum initial dose proves to be in most cases sufficient; however, subsequent maintenance doses, if

required, may be given orally, consisting of 1/2 the initial dose, at 12 to 24 hour intervals. If improvement is not apparent after 3 or 4 days, discontinue treatment and have the diagnosis redetermined by a qualified veterinarian or diagnostic laboratory.

Prices: 250cc. bottle, \$3.75; 500cc. bottle, \$6.75; six 500cc. bottles, \$38.25; twelve 500cc. bottles, \$75.00.

TRI-SULFA BOLUSES

Containing 50% Sulfathiazole and 25% each of Sulfapyridine and Sulfamerazine, for oral administration in the treatment of a wide variety of livestock diseases.

Box of 25x60 grain boluses	\$ 5.85
Box of 100x60 grain boluses	22.50
Box of 6x240 grain boluses	5.85
Box of 25x240 grain boluses	22.50

FRANKLIN SULFA-UREA-CRESOLIS POWDER



An antiseptic and germicidal powder containing 100% active ingredients for use as a dry dressing of minor wounds of livestock to promote sterilization and stimulate healing processes.

Ingredients: Sulfathiazole, 2%; Sulfanilamide, 13%; Cresclic 2%; Urea 83%.

Urea, combined with Sulfathiazole and Sulfanilamide, is credited with increasing the active effect of the sulfanamides by as much as ten volumes. The sulfonamides inhibit the growth of streptococcus, staphylococcus, and other bacteria. Urea aids in ridding wounds of pus, dead cells and debris.

Sulfa-Urea-Cresolis Powder is valuable in dry-dressing of wounds, for treatment of foul foot (foot rot), and for preparing an intrauterine douche for cleansing operation, treatment of metritis, vaginitis, etc. It is also reported that excellent results are obtained when used as a post-operative dressing in castration wounds. Price: 8-ounces, \$1.40; 1-pound, \$2.20.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN BLOOD STOPPER

For applying after dehorning and tail docking, and on shear cuts, wire cuts, brush snags, horn gouges, and similar bleeding in live-stock.



Proven one of the most popular items of the entire Franklin line. Particularly effective for use in connection with dehorning young cattle. Every stockman and farmer should keep a can handy. Franklin Blood Stopper is a combination of chemicals in powder form that produces a rapid shrinking of the blood vessels and tissues. The effect is to dry up and stop the blood flow. This also hastens the healing of the wound.

Of special value with livestock in warm weather is the fact that Franklin Blood Stopper so alters the character of the exposed blood as to make it unattractive to flies. This minimizes the risk of infection from flies. Its use tends to prevent and to destroy so-called proud flesh in wounds.

As applied by most operators for dehorning use, 1 pound is sufficient to treat 150 to 200 head of calves.

In shaker top cans: 4 ounces, **90c**; 8 ounces, **\$1.50**; 16 ounces, **\$2.25**; 10-pound can, **\$17.70**.

FRANKLIN LOUSE KILLER

In powdered form. For destroying lice and fleas on cattle, horses, poultry and pets. For animals with hair, apply generously and rub into the hair on all parts where lice and fleas congregate. For poultry, dust into feathers thoroughly.



Contains Rotenone, Pyrethrin, Nicotine, Naphthaline and Lethane, combined with a special base which clings to hide and hair or feathers, making quicker contact with parasites; therefore quicker and more certain kill. Won't scald or blister; not dangerous to use.

May be used with safety on dairy animals or animals being finished for slaughter.

Price: 1 pound, **\$1.00**; 2 pounds, **\$1.80**; 5 pounds, **\$4.20**; case of six 5-pound packages, **\$22.50**.

DEHORNING PAINT AND PROTECTIVE DRESSING

The popular and old reliable dehorning paint used by thousands of cattlemen for many years — now further improved and more effective. The best in its class. Contains bone oil. Does not easily harden or cake.



Also recommended for surface wounds on domestic animals, such as shear cuts, docking wounds, wire cuts, etc. Full directions on each can.

One gallon is sufficient for treating from 200 to 300 head of cattle.

Prices: Pint, **90c**; qt., **\$1.50**; gal., **\$4.95**.

PURCHASE SULFA DRUGS AND PENICILLIN

Canadian Government Regulations have recently been changed so that any bona fide stockman may buy sulfa drugs and penicillin, without prescription, from any registered druggist. If your local druggist cannot supply Franklin Sulfa Drugs, properly labelled "For Veterinary Use Only," write us advising product in which you are interested and stating name of druggist from whom you normally purchase your Veterinary Supplies.

FRANKLIN SULFAN-OL

Franklin Sulfan-Ol consists of Sulfanilamide, 38% by weight in Mineral Oil, 62% by weight. To be administered into the teat canal by means of a 40cc. Hypodermic Syringe to which an udder infusion tube has been attached.

Dosage: For Streptococcal Mastitis 40cc. in each affected quarter. For Staphylococcal Mastitis, 80cc. in each affected quarter. To be repeated as necessary.

Prices: Eight fluid ounces (250cc.), **\$2.20**; 1 quart (1,000cc.), **\$5.50**.

ALUMINUM SHOW STICK

A durable, dressy show stick to aid in showing animal to best advantage. Light in weight and balanced for greater ease of handling. Handle is detachable to permit packing in average show equipment box when not in use. Over-all length, assembled, 48 inches. Price, **\$5.00**.

HICKORY SHOW STICK

Square, tapered second growth hickory. Length, 4½ feet. Price, **95c.**

HICKORY CANE

Heavy, second growth hickory. Octagon shape, sturdy for long hard use. Price: **\$1.25.**

STOCKYARDS RAWHIDE WHIPS

This is the JUMBO Rawhide Stockyards Whip which is preferred by most users. Heavy and durable with rawhide core from tip through butt, woven under-cover, four plat outside cover, diamond finish, hand-braided buttons, with 10-inch looped buck snap. Available in wine color.

These whips are made by the foremost whip manufacturers in the country. Their years of experience make it possible to offer you the finest whips on the market.

Price: 6', **\$5.85**; 5½', **\$5.55**; 5', **\$5.35**; 4½', **\$4.95**; 4', **\$4.65**.

Quantity discount of 5% on lots of ½ dozen, 10% on lots of 1 dozen or more.

BULL RINGS

All made of finest quality cold drawn copper in sizes and types for all requirements.

SELF-PIERCING TYPE**Ordinary Weight**

Size Inches	Each
2½x5/16	65c

Extra Heavy

3x3/8	90c
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ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN ELECTRIC PROD POLE

The Franklin Electric Prod Pole is designed for the purpose of making the handling of livestock easier, safer, and more economical. Particularly useful in operations such as loading or unloading, dipping, working animals through chutes, etc. One light touch with the Franklin Electric Pole produces a surprising electrical shock sufficient to cause the animal to move, with no resulting injuries such as result from the use of a club or other prodding devices.

Light case is made of fiber tubing, weighs 2½ pounds complete, and is 26 inches long. Easy to handle. Holds five flashlight batteries. Has a removable power unit (coil) which may, in an emergency, be easily replaced with a spare.

Price, complete with batteries, **\$11.50**; coil only, **\$6.50**. Postage extra.

EXTRA BATTERIES, 10c each. Postage extra.

NEW GEM PROD

The New Gem Prod is powered with three flashlight batteries. The simplified instrument and batteries are in the handle for better balance and lighter operation. There are no loose contacts in the head.

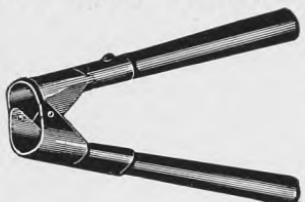


Standard—24" long, 2 lbs., Cadmium Plated, **\$6.50**.



Stubby—13" long, 1¾ lbs., for pocket convenience. Cadmium Plated, **\$6.00**.

BARNES CALF DEHORNER WITH HARDWOOD HANDLES



The cutting blades are of high grade tool steel with handles of choice hard wood.

In dehorning calves, the aim should be to take a ring of skin off with the horn and scoop out the horn button to prevent a stub growing out. This tool accomplishes this result, does a good clean job and has proven a thoroughly practical instrument for dehorning calves from 2 to 8 or 10 months of age.

Weight, 1 1/4 lbs. Price **\$2.80**
WITH IRON HANDLES



A larger size dehorner of the same type but of heavier construction with iron handles.

Price **\$4.00**

SUPERIOR DEHORNER



A quick, humane, safe way to dehorn calves up to 10 months. Does a clean, neat job, cupping the horn. Edges are of tempered tool steel that cut without crushing. Wt. 1 1/4 lbs., length 13 1/2 inches. Price, **\$3.00**.

TUBE CALF DEHORNERS

For removing horns on small calves up to about four months of age. Operation is very simple. Use the size dehorner that exactly fits the horn at the base. Place the cutting edge straight down over the horn; Mash down and twist first one way, then the other, until you have cut to the skull; then turn the dehorner at a 45° angle and shove and turn the cutting edge under the horn.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

Size No.	1	2	3	4
Diameter, ins.	3/4	7/8	1	1 1/8
Each	\$1.65	\$1.65	\$1.65	\$1.65
Per Set of four				\$6.00

FRANKLIN DEHORNING PASTE

Franklin Dehorning Paste has given excellent results over a period of many years, and has been used extensively by those stockmen who realize the advantages of dehorning early. The smooth, shapely heads which result from the use of this product go far toward bringing the stockman a higher price for his calves.



Easy to use under range conditions or on the farm. A small amount of the paste applied with knife blade or small wooden paddle to the

horn button produces a chemical action which kills horn growth. A small scab will appear which will drop off in a short time. For a very short time, there is a possibility that the spots will be attractive to flies, and normal routine inspection should be carried out and corrective measures taken if necessary.

Prices: 1 1/4-ounce jar (sufficient for 15 to 25 head), **55c**; 3 1/2-ounce jar (sufficient for 35 to 50 head), **\$1.10**.

LENK ELECTRIC DEHORNER



In the Lenk Electric Dehorner, we offer you an effective instrument at reasonable price. Wherever electricity is available, you may conveniently use this dehorner to employ the effective method of dehorning with heat. Clean, smooth heads will result. After use, an effective dressing such as Franklin Brand Dressing should be applied to the seared area. Complete instructions for use are included with each instrument.

115-volt, AC-DC. Price, **\$6.60**.

Soldering Tips for Lenk Calf Dehorner: The dehorning tip of the Lenk Calf Dehorner is removable, and may be replaced with soldering tip in either of two sizes. This feature greatly increases the utility of the dehorner and makes a useful, all-round instrument available to you.

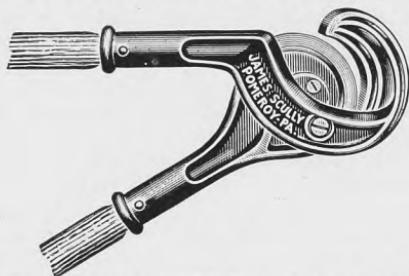
Prices: No. 750-1 Large Soldering Tip, **\$1.20**; No. 750-1A Small Soldering Tip, **\$1.20**.

COPPER DEHORNING IRONS

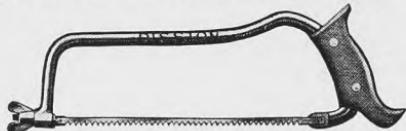
For stopping growth of horns on small calves by use of heat. These irons have cupped face to fit over horn buttons. 30-inch handle.

One set of 3 sizes: **\$7.50.**

Individual Irons, **\$2.75.**

CONVEX DEHORNER

Cutting blade works with sliding motion. Price: Large Size, for grown cattle, **\$19.50**; Junior Size for calves and goats, **\$15.50**.

NO. 6 DEHORNING SAW

The Disston No. 6 Dehorning Saw is used by cattle raisers and farmers. Designed especially to meet the need of stock men for a dependable dehorning saw of correct size and shape.

Frame of malleable iron, oval-shaped; strongly built; black finish. Blade of Disston Steel, 10 inches long, $\frac{1}{4}$ -inch wide, 12 points to the inch; pins fasten blade in frame.

Stretcher and wing nut adjustable at front of frame regulates straining of blade.

Shaped hardwood handle with large, comfortable grip for gloved hand; 2 rivets.

Price, each, **\$3.50.**

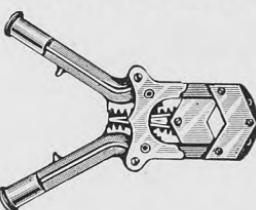
EXTRA NO. 6 DEHORNING SAW BLADES

$\frac{1}{4}$ -inch wide, 12 points to the inch.

Price, each, **60c.**

SOLID BACK SAW

Each **\$3.00**

FRANKLIN KEYSTONE TYPE

Outer edge of the cutting knife is pointed and its surface is parallel to that of the cutting edge. This makes the knife stronger and less liable to crack.

Improved Keystone Dehorner — complete with extra set blades and screws and long handle, **\$22.00.** Dehorner only, **\$20.00.**

Extra blades, each: **\$1.55.**

Extra handles each, **\$2.90.**

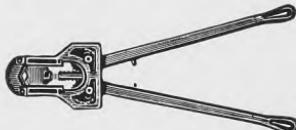
SPOON DEHORNER

(MATADOR TYPE)



For use on small calves. Made of high grade tool steel tempered to hold a sharp edge.

Price: **\$2.00.**

LEAVITT "V" BLADE DEHORNER

Most powerful leverage known. The famous "V" blades cut all around the horn.

No. 2—For medium to large size horns will also do small work. Opening 3 x 3 inches, length 3 feet, weight about 13 lbs. Price: **\$11.00.**

No. 3—For large horns. Will also do the work of the No. 2 size. Opening 4 x 4 inches, length 3 feet 2 inches, weight about 15 pounds. Price: **\$12.00.**

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

THE TECO CATTLE SQUEEZE



Height 90", width 54", length 88", weight 1200 lbs. Price, **\$515.00**, F.O.B. Calgary.

The TECO Cattle Squeeze is equipped with patented dehorning gate which securely holds the head of the animal for any operation. The gate swings open allowing the animal to leave through the front. It is quickly closed and locks automatically. It is adjustable in height for any size animal.

This squeeze is designed and constructed to handle any breed and type of cattle with a minimum amount of labor. The sections of the squeeze are joined together with pins and cotter keys, which are easily removed for dismantling.

The Rear Stop Gate is spring balanced, safe, easy, and fast to operate, enabling you to save time by preventing the animal from backing out of the squeeze or others crowding in.

A squeeze ratchet is mounted on top and operates by pulling a rope which draws the sides together. It locks automatically and is released by a trip rope.

Three types of sides are available: (1) the standard board side; (2) the standard branding or pipe side with bottom opening adjustable from 32 to 40 inches from floor of squeeze and (3) the low branding side which is adjustable from 26 to 34 inches from the floor. Milking doors can be installed in either of the standard sides.

In ordering specify the two types of sides desired.

All controls operate from one side, either right or left as ordered. **Specify type you prefer.**

Write for special folder describing the Teco Cattle Squeeze, Calf Chute and Cattle Stocks

The squeeze is portable, easily dismantled and loaded onto a pickup, ready for quick and easy transfer to a new location. They are also shipped knocked down to save on freight.

TECO CATTLE STOCKS

A portable completely adjustable stocks used for hoof trimming, tattooing, horn branding, operating, taking blood samples and all other work to be done on purebred and other cattle where full access is necessary to all parts of the body, feet and head.

It is equipped with the patented triple action dehorning gate, which is used on the Teco Cattle Squeeze. It swings open allowing the animal to leave through the front of the stocks.

The sling is 32 inches long with three 5-inch canvas belts which can be adjusted to the animal. It hangs perpendicular from an automatic ratchet on the top of the stocks. It is lifted by pulling a rope and locks automatically in any desired position. It is instantly released by pulling a trip rope. The hoof trimming timbers are made of 6x6 lumber 9 feet long with plenty of holes for tying feet. They are adjustable in width from 22 to 28 inches, and in height from 12 inches or higher, depending on the size of the animal.

There is a light gate on each side which can be closed while leading the animal into the stocks. After the head is secured in the headgate they can be swung into any position out of the way while working.

These stocks are shipped knocked down to save on freight. Weight, 900 lbs.

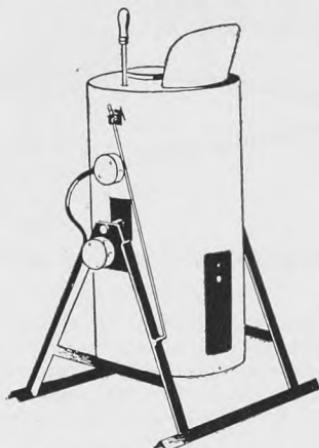
Price: **\$455.00**, F.O.B. Calgary.

THE TECO CALF CHUTE

These chutes are designed for branding, castrating, dehorning, administering vaccines, or any other operation on calves from two weeks to ten months of age. Built of pipe and sheet steel, welded together into one unit, with edges rounded and smoothed down to prevent injury to young stock, this chute has nothing about it to require any care or to wear out with use.

Weight, 540 lbs. Price, F.O.B. Calgary, **\$270.00**.

Cook Stock Feed the Easy, Modern Way with
ELECTRICITY!



Specifications of these electric feed cookers are as follows:

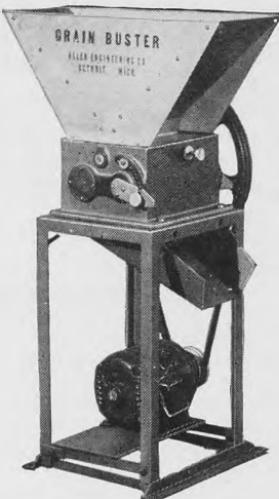
1. Manufactured of 16 gauge steel throughout, electrically welded.
2. Automatic-operated by diaphragm pressure control.
3. Adjustable electrical thermostat provides automatic heat control at any temperature desired.
4. Mounted on pivots for ease in dumping.
5. Water jacket heated by 2,000-watt immersion heater, "double boiler" principle.
6. Ample fiberglass insulation between the double tank and the outer case.
7. Rugged construction, to stand up under barn conditions.

"Feeding a barn full of show and sale cattle cooked barley has always meant a lot of extra and hard work for the feeder since about the only way this could be done was in a large iron kettle with a fire box under it placed either out in the open or at best, in a separate building sufficiently distant from all other farm buildings to eliminate all danger of fire. The raw grain must be carried out to the "cook-shack" daily as well as sufficient water to boil it. Then frequent trips must be made to refill the fire box with wood and see that there is plenty of water on the grain to prevent scorching. After the grain is sufficiently cooked it must be transported back to the barn to be fed. All this adds up to a great deal of hard labor and to say the least, made cooking feed for show cattle, a long and laborious task.

"The use of the new automatic electric cooker takes much of the labor out of cooking feed. It can be placed in the feed room right beside the feed mixing box. Since it is automatic it requires little attention. It operates on a very small amount of electricity. Due to the fact that the cooking tank is highly insulated a batch of cooked grain will stay hot for several hours, thus eliminating the necessity of cooking a fresh batch for each feed. Many feeders who have felt that cooking involved too much extra labor will be pleased to learn about this new cooker which takes practically all the labor out of feed cooking."

Price, F.O.B. Calgary, **\$210.00**.

THE ALLEN GRAIN BUSTER



**CRACKS
ONE
BUSHEL
OF
GRAIN
PER
MINUTE
WITH
1 H.P.
MOTOR**
**WRITE FOR
SPECIAL
FOLDER**

The Allen Grain Buster cracks corn, wheat, barley or other grain as coarse or as fine as you wish. Crimps oats or other grain without powdering — no meal. Not just a grain roller, not a grinder, it cuts.

Cutting cylinders of steel, helically machined cutting surface, gear driven.

All cutting edges, gears, shafts, bearings, enclosed within body for safety.

Magnet assembly in hopper for removing nails or other metallic substance.

Ball bearing construction.

Hopper of sheet metal with feed regulator.

Body of cast, one-piece construction, no sheet metal or wood. All working parts enclosed for safety.

Mounting stand with hinged motor base —optional—has reversible delivery chute.

Grain Buster, complete with hopper and magnet assembly, **\$225**. Does not include counterbalance pulley, machine base, grain chute, belts.

Machine base, **\$30.00**. Of welded construction with adjustable motor base and grain chute.

Double groove, 18" pitch diameter pulley, 1 3/16" bore for use on Grain Buster shaft, for Type "A" or "B" V-belts. Each, **\$15.00**.

All prices F.O.B. Calgary.



COPPER BRANDING IRONS

Franklin Copper Branding Irons are of new design and construction, the result of years of experience in their manufacture and the opinion of men who know branding. Copper has definite advantages over iron for branding iron construction, both in the use of the iron and economy of manufacture. Copper is a better conductor of heat than iron, providing a more even and longer retention of heat; does not "scale" as rapidly as iron, since it does not oxidize as easily.

Each iron is designed, as nearly as possible, to burn a clear, legible brand. Some brands cannot be burned without blotching, but Franklin irons are notched at joints to eliminate as much "blotch" as possible. Franklin Copper Irons have a $\frac{1}{4}$ -inch face tapering to a wider width at the back to give body to the iron and retain the heat. The 3-inch and 4-inch irons are made with a heavy boss, threaded deeply to hold the handle made of $\frac{1}{2}$ -inch iron rod, 42 inches long. Each handle has a big handhold to provide the grip necessary for good branding. The 2-inch irons are equipped with a $\frac{3}{8}$ -inch iron rod handle.

STANDARD COPPER IRONS

CARRIED IN STOCK—AVAILABLE FOR IMMEDIATE DELIVERY

A B C D E F G H J K L M M N O P Q R S
T U V W X Y Z 2 3 4 5 6 7 8 9 1) O

Letters in 3" and 4" Sizes. Numerals and Characters in 2", 3" and 4" Sizes.

Bars and Quarter Circles in 2", 3", 4" and 6" Sizes.

NOT STOCKED, BUT AVAILABLE AFTER SLIGHT DELAY AT STANDARD PRICES

Characters and Reverse Letters Above Available in 2", 3" and 4" Sizes.

PRICES ON STANDARD IRONS

	2-inch	3-inch	4-inch
Bar or Quarter Circle	\$ 3.50	\$ 4.50	\$ 5.80
Letters, Numerals and Characters	3.80	6.40	7.60
Set of Numerals—0 to 9 (6 and 9 Interchangeable)	32.00	53.00	62.00
6" Bar or Quarter Circle — \$6.00 each			

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

CAUTION

Copper will not stand rapid, extreme heat such as encountered in forges, weed-burners, blow-torches, and the like. When using such heating devices with Franklin Copper Branding Irons, care should be exercised to avoid too rapid or excessive heating. Franklin Copper Irons are guaranteed against faulty material and workmanship, but are NOT guaranteed against over-heating or careless and rough use. Used with care, these irons will give long, excellent service.

**SPECIAL COPPER BRANDS
MADE-TO-ORDER**

Special Copper Branding Irons can be made to your specifications at a reasonable cost. In ordering a special brand, care should be taken to design it as simply as possible, avoiding small, enclosed areas or sharp angles which will cause the brand to burn out or blotch. A large, complicated brand will not heat uniformly or apply evenly to the hide resulting in too deep a burn at one point and insufficient burn at another. For brands which combine two or more large characters or letters covering a large area, we recommend that each character be used on a separate handle and applied individually to insure best results.

Orders for special Copper Branding Irons should be accompanied by a scale drawing and exact measurements of the iron showing width of face. If possible, the drawing should be made on cross-section paper. Special irons will be made exactly to specifications provided by the drawing, and we cannot be responsible for an iron which has been made exactly to specifications but which does not conform to customer's brand as registered. Since special irons require considerable handwork and extra handling, several weeks' time should be allowed for manufacture and delivery.

	1 Character	2 Character
2-inch — each	\$ 8.00	\$13.00
3-inch — each	12.00	15.40
4-inch — each	13.60	18.00

If more than one iron is ordered from the same pattern, each additional iron will be priced at 20% less than prices shown above. The size of the iron is determined by the longest dimension of one character, or in the case of irons involving bars, quarter circles, etc.—by the length.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

BRANDING "DON'TS"

DON'T try to brand with anything but a hot iron; you can't freeze on a brand with a cold iron; but—

DON'T let the iron get too hot; it starts a hair fire and usually results in a poor brand.

DON'T use a forge or gas fire carelessly, it heats the iron too quickly and can "burn up" any iron. Wood makes the safest fuel for branding fires.

DON'T try to brand wet animals; dampness will cause the brand to scald, resulting in a blotched brand.

DON'T be in a hurry; take your time, as the animal will wear the brand all its life, so give it a good one.

DON'T get tender-hearted; the iron must burn deeply enough to remove hair and the outer layer of skin. When the iron is lifted, the brand should be the color of saddle leather.

DON'T throw your copper branding iron around while it is hot; copper and iron have a different ratio of expansion and to do so will loosen the handle.

FRANKLIN BRAND DRESSING

Franklin Brand Dressing is especially prepared for use on fresh brands following the use of hot irons. Its use promotes healing and causes the brand to peel cleanly and smoothly.



In addition to the use outlined above, Franklin Brand Dressing may be used as a dressing for scalds and blisters, and as a preliminary dressing to soften crusts or scabs over old wounds in preparation for giving definite treatment.

Prices: 1-quart, **\$2.00**; 1-gallon, **\$5.25**; 5-gallons, **\$22.50**. Postage extra.

**THE ORIGINAL AND PROVEN
CHEMICAL COMPOUND
BRANDING LIQUID**



A New and Better Method of Branding

Franklin Brand-Em-Ol is a powerful scientific chemical compound that eats or burns a brand into the surface of the hide without heat, producing a dry scab that in a few weeks peels off, leaving a clean-cut lasting brand. Brand-Em-Ol contains no acid. It penetrates the hide evenly over the area of the brand, without leaving any deeply burned sore spots as so often happens with a hot iron. This also lessens the danger of screw worm infections in warm countries.

The imprint of the brand is plainly visible from the time Brand-Em-Ol is first applied—showing up on the hair at first much as a paint brand does on the wool of sheep.

Price: 8 oz. (average 50 head), **\$1.25**; 16 oz. (average 100 head), **\$2.00**; 32 oz. (average 200 head), **\$3.50**.

**HAND CLIPPERS
FOR CATTLE AND HORSES**



This is the clipper used by State Brand Inspectors. Three-point balance. Bottom plate attaches without unscrewing. Length, 11½". Weight, 1 pound. Price: **\$6.00**.

**RED BRONZE BRANDING
IRONS WITH CONCAVE FACE
FOR APPLYING BRAND-EM-OL**



3-Inch Standard Letters or Figures, 3/8-inch Face each **\$2.00**

4-inch Standard Letters or Figures, 1/2-inch Face each **2.50**

Standard characters such as Half Circles, Circles, Quarter Circles, Crosses, Bars, etc., in either 3 or 4-inch sizes at prices quoted above.

Sets of Two 3-inch Irons **3.50**

Sets of Three 3-inch Irons **5.00**

Sets of Two 4-inch Irons **3.75**

Sets of Three 4-inch Irons **5.50**

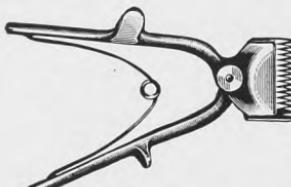
Sets of 3-inch Figures—9 in Set **13.50**

Sets of 4-inch Figures—9 in Set **17.00**

MADE-TO-ORDER IRONS

Special irons at from \$7.50 up, according to number of characters and size. Built on one handle. Orders for special irons must be accompanied by exact drawing of iron desired. (Allow 6 to 8 weeks' delivery.)

FETLOCK CLIPPERS



An inexpensive instrument for clipping fetlocks and for roaching or trimming. Each in individual box.

Price: **\$4.00**.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

MAASDAM POW'R PULL

THE TOOL OF MANY USES — STRETCHER — HOIST — PULLER 1500 POUNDS CAPACITY

STRETCHES barbed wire, electric or woven wire in building or repairing fence, telephone or power lines, guy wires, clothes lines. When equipped with extra Hand Protector Clamp may be used for splicing wires. Controlled ratchet permits slackening off as well as taking up slack. On small fencing jobs, such as hay stack fences, the entire job may be done with one operation, eliminating stretching between posts.

PULLS stumps, cars out of ditches, trailers or other equipment into position, loads onto trucks or any objects requiring a steady controlled pull up to $\frac{3}{4}$ ton. Excellent for pulling calves in difficult obstetrical cases.

HOISTS beeves and hogs for slaughtering, motors in automobile overhauling, windmill casing and sucker rods, and uncounted other heavy objects.

MOVES small buildings, machinery into place. Ideal for moving dehorning chutes, sprayers, etc., into position.

BINDS down loads of hay or lumber for safe hauling.

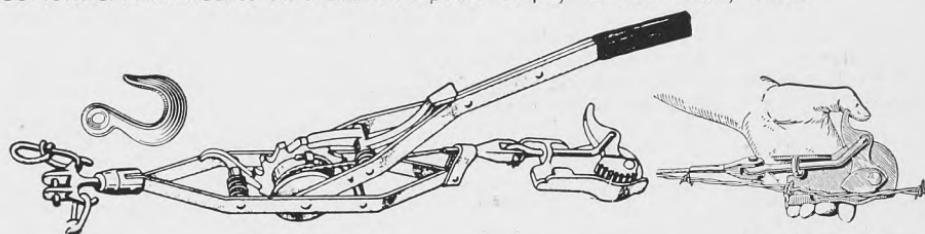
These are but a few of the uses. The Pow'r-Pull will find a use wherever extra power is needed. Ranchers, farmers, garage men, electricians, plumbers, contractors, truckers, all find the Pow'r-Pull indispensable to their work.

LIGHT..... Weighs only 6 pounds, 1/5 to 1/3 as heavy as comparable hoists and pullers. The POW'R-PULL may be used all day, providing easy power with less fatigue.

STRONG..... 14 to 1 power ratio provides up to 80% more pull per pound. 1,500 pounds capacity guaranteed. Tested to 50% overload. Soundly engineered, it is made of High Tensile Manganese Bronze, Aluminum Bronze, Navy Bronze, Duraluminum, Aircraft Cable, and Cadmium Plated Steel.

VERSATILE..... Fast and dependable on everyday jobs; may be converted easily and quickly for different uses. No chains to kink. No ropes to tangle.

ECONOMICAL..... Saves time and man power to pay for itself many times.



Pat. Pending

Pat. Pending

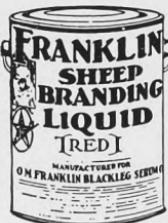
Maasdom Pow'r-Pull**Hand-protector Clamp**

Price: No. 72 Pow'r-Pull, complete with Hand Protector Clamp, Chain, and 6-foot cable	\$27.00
No. 108, Pow'r-Pull, complete with Hand Protector Clamp, Chain, and 9-foot cable	28.00
Hand Protector Clamp only	4.25
Utility Hook, $\frac{1}{4}$ -inch	.45

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN SHEEP MARKING PAINT

This paint stays on and holds its color remarkably well. Many sheepmen find that one marking lasts a year where formerly they marked twice a year. Does not injure the wool. Has exceptionally good scouring qualities. Ready to use; no thickening or additions. Apply with



brush or brand.

Franklin Sheep Marking Paint goes surprisingly far; 5 gallons will easily mark 3,000 head.

Black and Red—Price: 32 oz., \$1.50; 128 oz., \$5.00.

Blue, Green, Orange, Yellow—Price: 32 oz., \$1.75; 128-oz., \$6.00

BRANDING IRONS FOR SHEEP MARKING PAINT

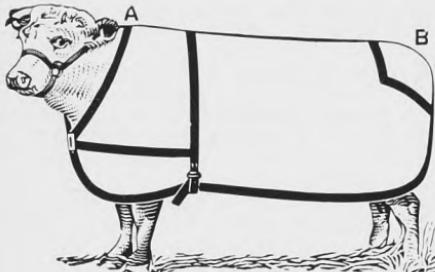


Lightweight construction, easy to use, inexpensive to own. For temporary marking of sheep, cattle, horses or hogs. For use in sorting or for identifying animals at sales. (Not for use with Brand-Em-Oil.)

All letters, figures and characters are clear and easy to read. Standard size, 2 1/2 and 4 inches.

Price: Per set, 0 to 9, 2 1/2-inch, \$6.50; 4-inch, \$7.00.

COW BLANKETS (Stay Put)



Our cow blankets are properly tailored to fit and stay on. The leg straps fasten thru a loophole in the blanket, making them comfortable and holding them in place.

They have one surcingle and an adjustable neck leather strap, fitted with a snap, making them easy to put on and take off. They are attractive and durable, being made of white 10-oz. duck with heavy web adjustable straps. **State breed of animals and measurements.**

We can supply blankets in colors at the following per cent additional to prices quoted: Khaki, 25%; Black, Red and Blue, 50%.

For 3/4" lettering with paint on blankets add **2c** per letter. For special size not quoted add 5% and give the measurements from A to B.

White 10-Ounce Duck

Length	Over	Unlined	Lined
42-inch x	66-inch (wt. 2 1/2 lbs.)	\$10.00	(wt. 5 lbs.)
54-inch x	72-inch (wt. 3 lbs.)	\$11.00	(wt. 6 lbs.)
60-inch x	84-inch (wt. 5 lbs.)	\$14.00	(wt. 7 lbs.)
66-inch x	90-inch (wt. 6 lbs.)	\$16.00	(wt. 8 lbs.)
78-inch x	100-inch (wt. 7 1/2 lbs.)		(wt. 9 lbs.)

12-ounce Duck, add 10%. 15-ounce Duck, add 20%.

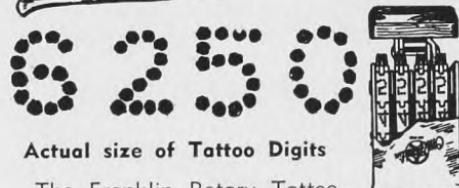
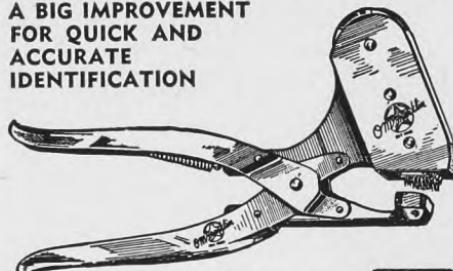
Quantity discounts—5% on half dozen lots, 10% on dozen lots.

(Write for prices where not indicated)

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

FRANKLIN ROTARY TATTOO

A BIG IMPROVEMENT
FOR QUICK AND
ACCURATE
IDENTIFICATION



Actual size of Tattoo Digits

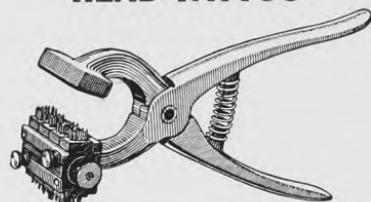
The Franklin Rotary Tattoo without doubt surpasses any other tattooing instrument on the market. The digits are arranged in endless chains, operating as does a dating stamp. There are 4 of these sets of digits in each instrument and they may be turned individually by slight pressure of the thumb.

The digits snap into position in positive and perfect alignment, making an even, straight impression. With this convenient arrangement any number from 1 to 9999 may be made with a simple turn of the chain. The digits are always ready to use—no taking out and replacing; no losing of individual numbers and no numbers upside down. They are always covered and protected. Tattoo ink should not be applied to digits of the Rotary Tattoo but to ears of animals after punctures are made.

Instead of the commonly used small nails set in lead base, the perforating points of these digits are made of the best steel set in a rigid, hard metal base so that there is no loosening or bending of the points with consequent uneven and unsightly tattoo marks.

Any part of the numerals will be replaced with letters for **75c** additional. One blank space in each chain permits placing one letter in any one or all chains in addition to numerals. Extra charge, **75c** for first letter, **45c** for each additional letter.

Franklin Rotary Tattoo in fiber box, complete with bottle of Franklin Tattoo Ink, **\$20.00**.

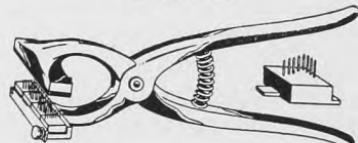
FRANKLIN REVOLVING HEAD TATTOO

Revolving head permits installation of letters or characters on one side for permanent use, while the numerals, which are to be changed after each use, are installed on the opposite side. By pulling pin at side of head, it may be revolved and locks in place automatically. Each side of head holds up to four characters.

The tongs are of malleable iron, and hold up to four characters.

Outfit complete with Tongs (Pliers), Set of Figures (0 to 9) either $\frac{1}{4}$ " or $\frac{3}{8}$ " size;	\$11.25
2-ounce bottle Tattoo Ink	8.00
Tongs (Pliers) only	.45
Letters or Figures, each	.45
Set of Figures—0 to 9	3.30
Complete Alphabet—A to Z	8.50

Special Characters—prices on request.

INTERCHANGEABLE TATTOO OUTFIT

Designed for use on both cattle and small animals and poultry. Supplied with $\frac{3}{8}$ -inch digits for cattle or $\frac{1}{4}$ -inch digits for small animals and poultry.

The tongs are of malleable iron and hold up to four characters of either $\frac{1}{4}$ -inch or $\frac{3}{8}$ -inch size, or only one may be used if preferred. These digits are inserted individually from front of tongs and no blank digits are required.

Outfit complete with tongs (pliers), set of figures (0 to 9), either $\frac{1}{4}$ -inch or $\frac{3}{8}$ -inch size;	\$9.00
2 ounce bottle Tattoo Ink	5.75
Tongs (pliers) only	.45
Letters or figures, each	.45
Set of figures—0 to 9	3.30
Complete alphabet—A to Z	8.50

Special Characters—prices on request.

FRANKLIN NECK CHAINS FOR MARKING CATTLE



Made of twist link coil chain and fastened securely with heavy key ring type fastener. May be adjusted to any link.

Number tags are of brass, opening equipped with hardened brass grommet or line which increases wearing qualities two- to

three-fold. Distinct engraved, black enamel filled numbers easily read at a distance. Specify numbers wanted.

Price (Shipping Weight 1 lb.) each ... \$1.55

Price, in Lots of 10 or less than 25
each

1.50

Price in Lots of 25 and less than 100
each

1.45

Price in lots of 100 or more, each

1.40

Twist Link Coil Chain, only, per foot

.16

BRASS TAGS ONLY, NUMBERED

Price in Lots of Less than 10each

1.00

Price in Lots of 10 and Less than 25
each

.95

Price in Lots of 25 and Less than 100
each

.90

Price in Lots of 100 or more, each

.85

Chain listed separately so you may order
in one piece and cut to meet individual
requirements, if desired.

Heavy key ring type fasteners, only,
each, 20c.

DR. MILLER ANIMAL MARKER & PIG SNOTU CUTTER



Ear marker and pig snout cutter. Marking blades come in round, square and triangle shapes, $\frac{1}{2}$ -inch in diameter, as shown. Also available but not shown, pig size V marking blade and heart shaped blade.

Price: Marker with pig snout blade, \$4.75

Extra marking blades, 85c each.

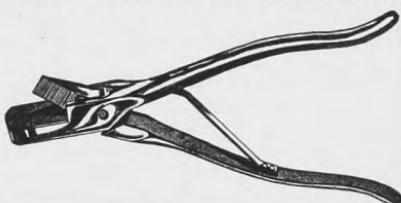
FRANKLIN TATTOO INK

An indelible black ink of heavy, creamy consistency. Extensively used by leading breeders in all parts of the country.

Produces a legible tattoo mark in dark-eared cattle—hardest test of a tattoo ink. A lighted flashlight held behind the ear will make reading of the tattoo mark in dark-eared animals much easier.

Price: 2-oz. bottle, 60c;
6-ounce bottle, \$1.20.

EAR NOTCHING PUNCH



Large Medium Small
Exact Size of Die

This punch is widely used for notching or marking the outer edge of ears of animals. It cuts like scissors. The size of the mark with this punch may be regulated by using tip of punch so that a small or large cut can be made as desired, depending on size of animal. The carefully tempered steel dies of three shapes of the size illustrated are not interchangeable, therefore state shape of die wanted when ordering punch. Made of semi-steel composition.

Price—Either V-shape or square die, or inverted U.

Large size \$6.50

Medium size 5.75

Small size 3.75

Identify Cattle - Sheep - Hogs by EAR TAGS

Ketchum Kurl-Lock Ear Tag

We consider the Ketchum Kurl Lock Ear Tag as the best ear tag ever offered for general use.*

The tag is made from cadmium coated steel, has an integral locking bar, over which the pointed end of the tag, after piercing the ear, securely locks. The tag is slipped into the special pliers as illustrated. You then place pliers with an open tag in jaw over the ear of the animal and close them. The one movement takes the sharp point of tag through the ear and seals the tag. (Full directions sent with each order.)

No fuss, no pain, the hole, being the exact size required for tag, soon heals, leaving a very permanently sealed tag which cannot be removed without detection.

Prices for either Kurl-Lock or Clincher Tags—

No. 3 Size—Do not ask for more than 3 letters on this tag. Any consecutive numbering.

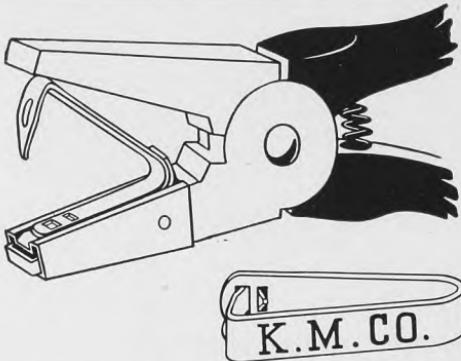
Quantity	Price	Postage extra Weight	Sales tax extra if Certif. not signed add
25	\$1.75	8 oz.	.14
50	3.00	1 lb.	.24
100	4.00	1 lb.	.32
250	8.00	3 lb.	.64
500	14.00	6 lb.	1.12
1000	26.00	12 lb.	2.08

No. 2 Size, Cattle—Can be stamped with 8 letters on one line or up to 16 in two lines. Any consecutive numbers.

Quantity	Price	Postage extra Weight	Sales tax extra if Certif. not signed add
25	\$ 2.25	8 oz.	.18
50	3.15	1 lb.	.25
100	4.25	2 lb.	.34
250	8.50	4 lb.	.68
500	15.00	7 lb.	1.20
1000	28.00	15 lb.	2.24

* The Tamperproof Ear Tag for cattle is sold to the Canadian Government exclusively for tuberculosis eradication and calf vaccination work.

Prices on all Ketchum Tags & Pliers are subject to 8% Sales Tax unless certificate accompanies order.



KURL-LOCK SPECIAL PLIERS

Special pliers are required for the Kurl-Lock made in two sizes, No. 2 and No. 4. The same pliers will not do for both sizes.

Price, Japanned \$2.50

Whitened 2.75

(Add postage on 1 1/4 pounds)

KETCHUM CLINCHER TAG

This tag was the "best" tag for many years and is still a good tag. If you have pliers, we will be glad to supply you with tags. Clincher tags are made of same steel and workmanship as Kurl Lock.

Price: Japanned, \$2.50; Nickel Plated \$3.00

(Add postage on 1 1/4 pounds.)

READ

Prices include stamping and numbering. Print your name and address, handwriting at best is not dependable.

Any change in stamping must be considered a separate order.

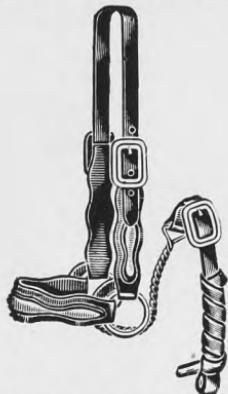
Individual tags and any quantity less than 25 are 10c EACH.

Orders for official registration tags must be forwarded DIRECT to the Canadian National Live Stock Records, Ottawa.

Allow ten days for delivery.

SALES TAX EXEMPTION

So that you do not have to pay 8% sales tax please copy this on to order and sign: "I certify that the goods ordered hereby are to be used directly in the process of production of goods on my farm."

FRANKLIN SHOW HALTERS**BULL HALTER**

Made from finest Russet Saddle Leather, with solid Brass Trimming. 2 1/4" double and stitched, scalloped cheeks, 1 1/4" solid Brass Buckle each side with 1 1/4" head. 2 3/4" Scalloped Nose Band with raised overlay in centre, 1 1/8" full leather lead (or with chain if available at the same price.)

Price, each: \$10.00.

COW OR 1 1/2 YEAR BULL HALTER

Made from the finest Russet Saddle Leather with Solid Brass Trimmings. 2" scalloped cheeks with solid brass buckle both sides. 2" Scalloped Nose Band with raised overlay on centre. 1" full leather lead (or with chain if available at the same price).

Price, each: \$8.80.

YEARLING SIZE HALTER

Made from the finest Russet Saddle Leather with solid brass trimmings, 1" crown to buckle on both sides, shaped cheeks, scalloped nose band, with a sewn scalloped layer on nose band, 7/8" lead.

Price, each: \$8.40

CALF SHOW HALTER

Made from the finest Russet Saddle Leather with solid brass trimmings, 1 1/2" scalloped cheeks with solid brass buckles both sides. 2" Scalloped Nose Band with raised overlay in centre, 7/8" full leather lead (or with chain if available at the same price.)

Price, each: \$7.60.

HALTER CHAIN

Nickel finish, 18 inches long, with swivel and snap. Price: \$1.50 each.

NEATSFOOT LEATHER CREAM

A Saddle Soap in liquid form, for cleansing, softening, and preserving smooth finished leather goods. Not intended for use on rough finished leather such as suede.

Price: 8-ounce bottle, \$1.10.

PROPERT'S LEATHER SOAP

Famous through 5 reigns, the choice of the discriminating during the reigns of Queen Victoria, King Edward VII, George V, Edward VIII and George VI. Used by the British and American Armies.



The genuine, unexcelled, imported article. Price: Large size, 60c; small size, 35c.

'Belvoir' Glycerine Saddle Soap

An excellent product for those preferring a solid bar soap, for economical use. Famous for years in England as a very satisfactory leather cleanser and preservative — now available in Canada. 12 oz. bars, each, 80c

PURE NEATSFOOT OIL

Price: 1 pint, 80c; 1 quart, \$1.25; one gallon, \$4.50.

WASH APRONS

Rubber wash aprons that really protect. Built to stand up under hard wear, just the apron for show circuit use.

Price, each: \$4.00.

"ALL-WEATHER" LIVESTOCK MARKING CRAYONS

A special prepared paint solidified in stick form. Quick and economical for marking livestock under any weather conditions. Non-injurious to animal — hide, hair or wool. Marks readily removed in scouring process. Each crayon in handy cardboard protective sleeve. Available in six colors—Yellow, Red, Blue, Green, White and Black.

Carton of 12 of one color \$2.50

Carton of 12 of assorted colors \$2.80

Single crayons, less than 1225

FRANKLIN BLUE RIBBON COAT DRESSING



Prepared from our own formula. Superior for dressing the hair of animals for show. It is not sticky and does not injure the hair. Economical to use.

For the natural bloom that catches and holds the eyes of the judges.

Price: Pint, 90c; qt., \$1.50; gal., \$4.25.

FRANKLIN SHAMPOO CONCENTRATE

A Cocoanut Oil Shampoo for Animals

Effective with either warm or cold water. Wet the hair first then apply small amounts of Franklin Shampoo and scrub with a stiff brush, such as the Franklin Rice Root brush. May be diluted as desired by the addition of pure water. The use of Franklin Shampoo Concentrate leaves the hair with a soft lustre. Ideal in fitting animals for the show ring.

Price: 1 pint, \$1.00; 1 quart, \$1.80; 1 gallon, \$4.80.

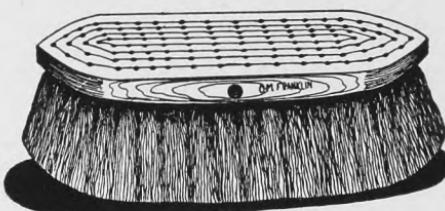


CIRCULAR REVERSIBLE CURRY COMB

Of spring steel, having sharp teeth on one side and rounded teeth on the other. The all-round grooming necessity.

Price: 75c.

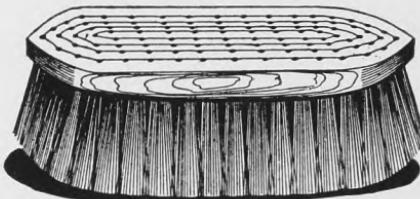
RICE ROOT GROOMING BRUSH



The most popular brush used over the country for show herds.

Built for long, hard wear of selected rice root, handmade throughout. Superior construction for first class grooming and washing service. Rice roots sewed in with wire. Medium size, 2 3/4" x 8"each \$3.00

THE FRANKLIN SOFT FIBRE GROOMING BRUSH



A classy companion for our famed Rice Root Brush. Especially adopted for short hair dairy breeds and horses. Made of soft white fiber, drawn with wire in an open back of convenient size. Every brush of guaranteed quality and workmanship.

Medium size, 2 3/4" x 8"each \$3.00



WATER OR SWEAT SCRAPER

With 10-inch face.

Price: 90c each.

ALUMINUM SWEAT SCRAPER

Made of the finest aluminum, strong, light, sanitary, smooth edges, easily kept clean.

Price, each\$1.10

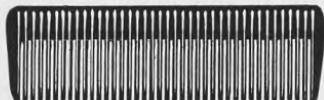
ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

AUTOMATIC LOCK CATTLE LEADER



This is a new type lead with many advantages over old type leads. Light in weight, neat in appearance. Permits animals to eat without removal. On show animals, gives nose smoother appearance than longer type leads. Automatic lock easily released. Price: \$2.00 each.

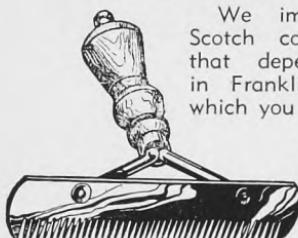
DRESSING COMBS



Our special black hard rubber combs, all coarse, smooth, shapely teeth. A popular style made by the largest comb manufacturer in the United States.

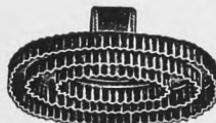
Price: \$1.35 (Princess brand).

FRANKLIN'S IMPORTED SCOTCH COMBS



We import our own Scotch combs to insure that dependable quality in Franklin merchandise, which you will always find indispensable for preparing animals for the show ring competition. Price, \$1.10.

FLEXIBLE RUBBER CURRY COMB



Removes dirt and loose hair painlessly and efficiently. Eliminates danger of infection and irritation resulting from sharp, rusted steel curry comb. Cleans tender parts of the legs without irritation. Price: 75c each.

LEATHER LEAD

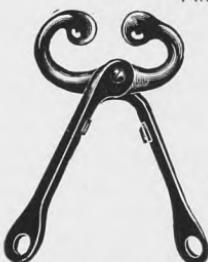
½-inch by 4½-foot leather lead of fine strong tan skirt leather with snap or loop. Suitable for use with bull ring or spring type ring.

Price, \$1.75 each.



"KANTSILP" CATTLE LEADS

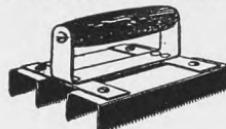
Made of malleable iron with fine quality holding spring. Snaps into nose and holds firmly. Does not pierce the nose. Easy and quick to insert and remove. Not to be confused with breakable cast-iron leads. 2½ inch size, Malleable Iron, each 90c Aluminum, each 60c



FRANKLIN LEADER

A handy device for handling cattle. Price, without rope, \$1.50.

MARKING and LINING COMBS



For lining or waving preparatory to curling for the show ring. Substantially made of best quality steel. Price: 90c.

SCOTCH TYPE ROUND TOOTH COMB

New type large size comb with special round teeth which have a decided and important advantage over square cut teeth by eliminating the cutting and reducing pulling out of hair, especially on winter coats.



or fine when ordering. Price, \$2.00.

Made with coarse teeth for long coats and fine teeth for short coats.

Specify coarse

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

HOOF NIPPERS

The same make and quality as our Hoof Parers but with a different shape of cutting jaws for different conditions.

Price: 12-inch size, **\$6.00**; 14-inch size, **\$7.50**.

HOOF KNIVES

Finest quality Sheffield steel blade. For paring and cleaning. Bone handle. Length, 8 inches; $\frac{3}{4}$ -inch blade.

Price: **\$1.75**.

HOOF PARERS

Heller made. The standard of quality. A sturdy tool that does efficient work.

Price: 12-inch size, **\$6.00**; 14-inch size, **\$7.50**.

Sunbeam-Stewart Hand-Powered Clipping and Shearing Machines

No. 1A—Clipping Machine. Weight, 27 pounds. Price **\$24.50**

No. 9—Shearing Machine. Weight, 45 pounds. Complete with 2 combs and 4 cutters. Price **\$45.00**

Repair parts for clippers are carried in stock at mnfr's. standard price schedule.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

Sunbeam
STEWART

ELECTRIC ANIMAL CLIPPERS

CLIPMASTER
with
Powerful motor
inside the
easy-grip handle

Clipping avoids contamination, reduces sediment, lowers bacteria. Makes it easy to keep cows clean. Aids in the control of lice, ticks, etc., which greatly affect milk production.

No. 51-1 CLIPMASTER, 110-120 volts, each—
\$37.95

No. 52 for 32v. D.C. or No. 53 for 220v. AC-D.C., each—**\$40.75**.

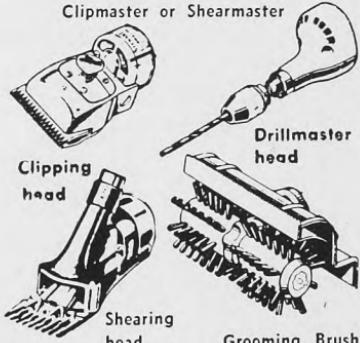
SHARMMASTER

Gets 10% more wool than hand blades. Same power unit as the Clipmaster. Latest patented tension control.

No. 31B-1 Shearmaster
110 volt, each **46.95**.
No. 32 for 32v. D.C. or
No. 33 for 220 v. A.C.—
D.C., each **\$49.50**.

**NO end to their usefulness**

These Attachments fit
Clipmaster or Shearmaster



No. 31A Shearing Head	\$24.50
No. 41A Drillmaster Head	\$12.75
No. 51A Clipping Head	\$15.75
No. 61A Grooming Brush	\$22.50

FRANKLIN HORN SHAPING WEIGHTS

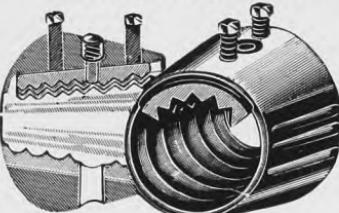
The new Franklin Horn Shaping Weight is an entirely new type weight which was extensively tested by many prominent breeders before being placed on the market.

The floating wedge feature of this new weight permits it to be readily adjusted to fit tapering of horn regard less of whether it is a short or long taper.

This weight may be readily adjusted to fit horns on either bulls or heifers, whereas with many old type weights it is often necessary to shape the horn to fit the weight.

The oval gripping surface of the wedge and the gripping surface of the body of the

WITH FLOATING WEDGE



weight were designed to hold the weight on and to do so without injury to the horn.

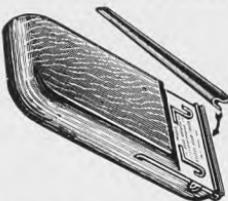
The opening has been enlarged sufficiently so that the weight will fit any age animal ordinarily requiring such size weight.

Made in $\frac{1}{2}$, 1, $1\frac{1}{2}$ and 2-pound sizes.

Price per pair: $\frac{1}{2}$ -lb. size, **\$1.55**; 1-lb. size, **\$1.80**; $1\frac{1}{2}$ -lb. size, **\$2.15**; 2-lb. size, **\$2.45**. Discount on quantities of 25 pair, 5%; 50 or more, 10%.

Where a decided correction forward is desired, weights with eyes and spring attached will be furnished at \$1.50 extra per pair.

HOOK HORN SCRAPERS



The finest instrument obtainable for dressing rough horns.

A fine steel cutting blade set in a wood handle. Blades are easily sharpened or replaced.

Price, complete, **75c**. Extra blades for our Hook Scrapers, ea. **22c**.

HORN RASPS



Half round with bevelled end. A rasp and file combined to smooth and shape the horn or hoof. Length 10 inches. Price: **\$1.50**.

FRANKLIN HORN TRAINER

WITH SPRINGS



Made for the purpose of pulling horns forward or making other corrections after horns have been pulled down and are too far back.

Cones are made of aluminum, weight 2 ounces each, to eliminate weight in order to pull horns forward only. Adjustable leverage so that one horn may be corrected more than the other if necessary, or pulled up or down as well as forward. Price: **\$3.00**.

NOTE: For complete information and prices on newly designed and improved Franklin Copper Branding Irons, see pages 42 and 43.

FRANKLIN HORN BRANDING IRONS



Solid copper. Long wearing. Vented to lessen scorching inside the numbers. Improved shaped figures with concave face. Black iron handles. Two sizes— $\frac{5}{8}$ inch and $\frac{7}{8}$ inch, each in set of nine numbers.

Price for either set of nine irons, **\$11.00**.

Individual standard numbers, each **\$1.20**.

Individual standard $\frac{5}{8}$ -inch and $\frac{7}{8}$ -inch letters, each, **\$1.40**.

Bloodless Castration

The bloodless method of unsexing male livestock originated over 20 years ago. Its practice has gradually spread until today it is largely supplanting the knife in all livestock countries of the world.

By avoiding bleeding and wound infection, this method prevents losses. Risk of infection from screw worms or maggots is greatly reduced.

The operation is quick, clean and humane. The shock or setback is very slight and does not throw the animals off feed. The castrating can be done safely at any season and any weather condition. No after-treatment is required.

Because the blood vessels and testicular cords are tender while the hide of the bag is tough, it is easy, with the proper instrument, to sever these without injury to the hide. The testicles are absorbed without harmful after-effects.

FRANKLIN IMPROVED CASTRATOR

The new Franklin Improved Castrator is a surgical instrument, built with careful precision, yet made strong and rugged for long, hard use. Gives perfect results on all ages of cattle from baby calves to old bulls.

Severs the cord without injuring the skin. The new Franklin is the only castrator that provides for an adjustment of the jaws to accommodate the varied thickness of skin found in animals of different ages. This adjustment is quickly and easily made. Also readily adjusted to take up any wear.

In this new model the jaws lock together after the operation of crushing the cords. This allows the operator to remove his hands from the instrument, if desired, while making an examination of the results, without loosening the pressure of the castrator.

The angle of the jaws prevents the cord from slipping out as pressure is applied. Its use avoids "misses." Unsurpassed for lamb docking.

Instructions: First, pull the scrotum (bag) away from the body, working the testicles away so as to make room for inserting instrument over the cords well above testicles. Open jaws of instrument to sufficient width



to allow jaws to be slipped over scrotum. Hold instrument in one hand, by one handle with the other handle against the body or knee, or on the ground if preferred; with other hand pull down both testicles; then hold the spermatic cord that is desired to be crushed, fully 1½ inches or more above testicle and crowd it to the extreme edge of scrotum; then insert cord into the jaws of instrument **only far enough to be certain that the entire cord is inside the jaws.** (This is important in order that no more of the interior of the scrotum be crushed than necessary, as it is very undesirable to crush

the blood vessels therein.) Close instrument sufficiently to hold cord from slipping, then release cord with fingers and completely close instrument, using both hands, holding instrument tightly closed until certain that whole cord is entirely crushed. Release instrument and repeat operation on other cord on other side of scrotum. Cords should each be crushed or severed about one inch above testicles. **Never attempt to crush both cords at the same time.**

High grade steel, nickel plated, with rubber-covered handles. Price: **\$21.50.**

ELASTRATION

The New, Scientific Method of Bloodless Castration and Tail Docking of Lambs

Accomplished by applying a specially compounded rubber ring to the scrotum or tail by means of the ELASTRATOR instrument. Constricting action of ring stops blood circulation, causing scrotum and tail to atrophy and drop off. It is rapid, bloodless, and there is no cutting or crushing. Operators learn to use it quickly. Can be used in wet as well as dry weather.

First used on large scale in New Zealand about five years ago. Its growing popularity is shown by its use on over a million and a half head in that country last season and about a quarter of a million head in this country during 1947.



Applying ring to scrotum which generally drops off in 2-3 weeks

A survey conducted recently by the California Wool Growers Association among users in U.S. during 1947, indicates that 90 per cent of them state they will make it standard practice from now on on their lambs. Some prefer it for castrating, others for docking. Several state they used it with good results on small calves.

Results reported indicate it is satisfactory for castration of lambs and for docking of lambs early enough to drop their tails before fly season.

PRICES:

Elastrator outfit complete with apron and key: **\$14.00**.

Elastrator Rings: (Order separately) 25, **55c**; 100, **\$2.00**; 250, **\$4.40**; 500, **\$7.70**; 1,000 to 1,500, **\$13.20** per M; 1,500 or more, **\$12.10** per M.

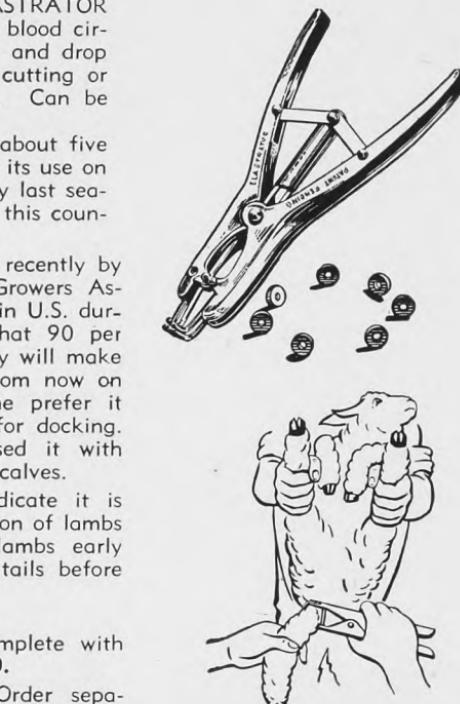
WHAT SOME OF THE USERS SAY:

I liked this method better than any I've ever used. It's O.K. on very young lambs from one day to 2 weeks old. JAS E. LEWIS, Roseburg, Ore.

Very satisfactory. Best method used. DR. KARL S. HARMON, Eldon, Mo.

I am very well pleased with the Elastrator for castrating. It is superior to the knife. JOHN T. NOONEN, Kremmling, Colo.

For castrating it has advantage of being more likely to avoid screw worms. For docking, more humane than cutting and avoids open sores. Very little screw worm trouble. PROF. MARVIN KOGER, Dept. of Animal Husb., State College, N. Mexico.



Applying ring to tail which generally drops off in from 4-6 weeks

The Elastrator is perfect for castrating and docking. Plan to use it next season on 2200 head. T. H. GOODING, Ketchum, Idaho.

Results were very good. VETERINARY RESEARCH LAB., Bozeman, Mont.

In my opinion the Elastrator is wonderful. We docked lambs when it was zero and a day or two later it dropped to 25° below. One person can do it easily. MRS. WM. GILES, Limestone, Mont.

For castrating, the Elastrator is excellent and reliable. No open wound, no chance of infection. SIEBEN LIVESTOCK CO., Helena, Mont.

THE BURDIZZO CASTRATOR

GENUINE IMPORTED CASTRATING INSTRUMENT

For bloodless and more humane method of castrating livestock by severing the testicular cord without injury to bag (scrotum).

By this method the testicles wither away and disappear through absorption by the animal system. Setbacks, loss from blood poisoning and infestation of screw worms are eliminated.

Crush one cord at a time. Each cord should be pressed well into the side of scrotum so that as little as possible of the scrotum is compressed by the instrument.

Apply instrument as shown in figure; close jaws completely for a few seconds — release the instrument and perform the same operation on the other cord. Immediately after the blood vessels of the cord are crushed, the flow of blood to the testicles is stopped and they atrophy and disappear. Complete atrophy is noticed about six weeks after the operation. The animal does not suffer and no special attention or treatment is required.



FOR DOCKING LAMBS' TAILS

Use either small or large size instrument. This instrument is used extensively for docking. Cut off tail inside the closed jaws. The crush of the pincers will reduce bleeding.

A high quality instrument (not a tool) made of high quality steel, precision fitted, nickel plated, with cord stop, easy to use. This type of clamp instrument has been successfully used for many years.

Baby Size: 9 inches long; weight, 24-oz. For lambs. Price: **\$15.00.**

Small Size: 12 inches long; weight, 3-lbs. 4-oz. For lambs or young calves or for docking lambs. Price: **\$18.00.**

Large Size: 16 inches long; weight 4 lbs. 8-oz. For calves or bulls. Price: **\$18.00.**

Indian Size: 19 inches long; weight 5 lb. 8-oz. Price: **\$18.00.**

Knee Rest and Spanner for above, **\$2.00.**

EMASCULATOR



Straight head with curved handle. Can be operated with one hand. Adjustable screw head for easy cleaning. It crushes before it cuts.

Handsome nickel. May also be used for docking lambs. Weight, 2 pounds.

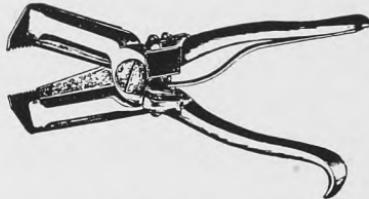
Plain Type—Price: **\$15.00.**

Sklar Type—Price: **\$26.00.**

White's Type—With double crushing attachment. Regular size. Price: **\$30.00.**

ALL-IN-ONE CASTRATOR

"IT HAS ITS OWN TEETH"



Castrator, Docker, and Ear Marker for lambs and kid goats. Quick, practical, and convenient to use and results are positive. The All-in-One Castrator can be quickly and easily disinfected after each operation, thus reducing chances of infection.

Price: **\$13.00.**

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

Franklin Syringes

O. M. Franklin Syringes are powerful, accurate and thoroughly practical instruments for their respective uses. Produced from the highest quality materials obtainable and are the best that can be had.

These syringes are guaranteed to be free from flaws or defects, and to achieve the purpose for which they are sold in a most practical manner.

PREPARATION AND CARE OF SYRINGES AND NEEDLES

Always carefully sterilize **before** and **after** using.

BEFORE USING: Sterilize by placing in a pan of water and bring same to a boiling temperature. After sterilizing, a few drops of glycerin drawn into the barrel for lubricating the piston rubber makes it operate easily.

AFTER USING: Rinse with warm water, take it apart and cleanse thoroughly, then reassemble same and place in water and bring to boiling temperature to sterilize, after which thoroughly dry.

The packing (or plunger rubber) should be left loose in the barrel when syringe is not in use or when it is being sterilized.

Do not use oil, vaseline or strong disinfectants, as such will destroy the rubber parts. Glycerin is the ideal lubricant.

Thoroughly clean syringes and needles are of utmost importance in all vaccinating work.

ADJUSTMENTS OF SYRINGES

When syringes have been taken apart for cleaning and before again attempting to use them, see that washers at the ends of the glass barrel are properly in place. Also see that cap to syringe barrel is screwed down tight.

NO. 6F

A Convenient Small Syringe for Blackleg Use

A 6-cc. special 6-dose syringe for injecting. Furnished with two needles.

Price: \$2.60.



ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

Next, adjust packing (plunger rubber) in barrel by turning palm rest on upper end of stem or piston to the right to tighten and to the left to loosen.

This packing or plunger rubber should be merely tight enough in the syringe barrel to prevent the vaccine from leaking back past the packing or plunger rubber. If it is too tight, it will not move freely in the barrel when the syringe is being operated. This might also break the barrel.

If the rubber packing tends to stick to the glass barrel, a few drops of glycerin pulled into the syringe and worked down around the packing will serve to make it work easily.

For Testing Accuracy of Adjustment

Use water which has recently been boiled or if the operator's hands are thoroughly clean, he may place a finger over the end of the adaptor (to which needle attaches) pull plunger out full length and let it go.

If packing or plunger rubber is correctly adjusted and properly lubricated, the plunger will quickly be pulled into the syringe barrel by the vacuum created in the barrel. Otherwise turning palm rest to Right or Left will result in a proper adjustment as indicated by the action of the vacuum on the plunger.

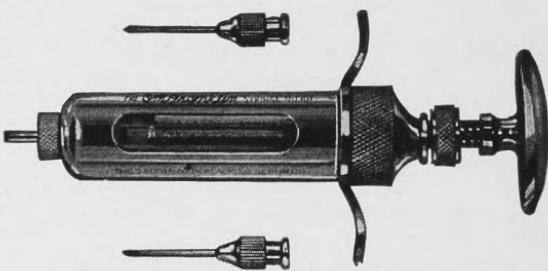
Franklin Syringes

No. 10-F

A 10-cc. hypodermic syringe, made of brass, chrome plated. It is popular for bacterins other than blackleg, some also preferring it for blackleg.

Graduated for either 1cc. or 5cc. dose. Short barrel type, heavy duty. Resistance glass barrel not easily broken.

Price: With two needles, **\$3.25.**



No. 20-F

A 20-cc. heavy duty hypodermic syringe. Same type as No. 10-F with twice the capacity. Graduated with either 1-cc. or 5-cc. doses.

Price: With two needles, **\$3.70.**

No. 25-F

A 25-cc. syringe. Furnished with two needles. Price: **\$3.85.**

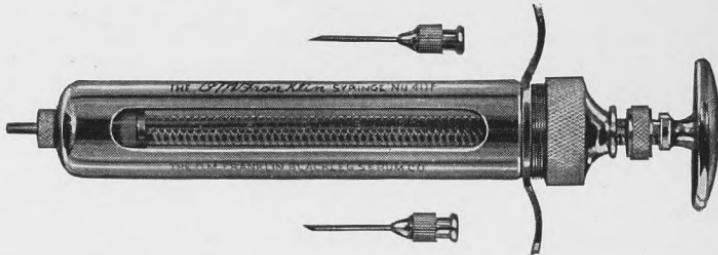
No. 40-F

A 40-cc. hypodermic syringe, made of brass, chrome plated.

Heavy duty resistance glass barrel, graduated for 5-cc. doses.

Furnished with two needles.

Price: **\$4.15.**



No. 60-F

A 60-cc. syringe equipped with Lock Adaptor, without needles. Price: **\$4.25.**

NEEDLES AND PARTS FOR FRANKLIN SYRINGES

Syringe No.	6-F	10-F	20-F	25-F	40-F	60-F
Extra Needles	Each	\$.25	\$.25	\$.25	\$.25	\$.25
Washers	per set	.15	.15	.15	.15	.20
Resistance Glass Barrels	each	.45	.65	.75	.90	.90
Packings (Plunger Rubbers)	each	.20	.35	.35	.35	.70
Extra Slip Adaptors	each	.30	.30	.30	.30	.30
Luer-Lok Adaptors	each	.35	.35	.35	.35	.35
Luer-Lok Needles, 16-gauge	each	.25	.25	.25	.25	.25

Nos. 10-F, 20-F, 25-F, 40-F and 60-F Syringes have extra heavy resistance glass barrels.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

VETERINARY INSTRUMENTS

Reliable quality products for stockmen's use. The more popular items are shown here, but if you don't see what you want, let us know as we have available all types of Veterinary Instruments.

OPERATING LANCE OR SCALPEL



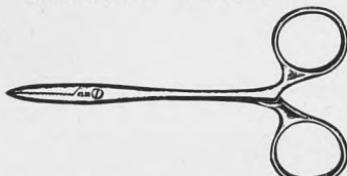
Used for making incisions for tie knives and other similar purposes.

Heavy, renewable blades of highest quality surgical steel, finished to sharpest razor edge.

The handle is of sturdy stainless steel and the blades are easy to attach and detach. An economical instrument of many uses.

Price: One handle and six blades, **\$2.50**; handles separate, **\$1.50**; blades separate, **\$2.00** per dozen.

ARTERY FORCEPS



A handy instrument around livestock—to pick up an artery end in wounds—to pull an artery in dehorning—to pick up tissue for suturing in operations.

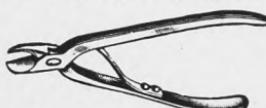
Price: **\$1.65**.

SURGICAL NEEDLES

Emergency operations made conveniently by the stockman with his own needles. Curved for easy use. All sizes and lengths. Quality material for long life. Keep a supply within easy reach.

Prices: **30c** and **40c**.

PIG TOOTH NIPPER



Length, $6\frac{1}{2}$ ins. Swedish, price, **\$1.75**. Nickel plated, 6", price, **\$3.00**.

SUTURES

Linen: Fine, Medium and Coarse, per card, **60c**.

Catgut: Nos. 1, 2 and 3, per tube **70c**.

BLEEDING NEEDLES

HUBLESS

A 14- or 16-gauge, 3-inch needle. Price: **40c** each.

CENTRE HUB

A 14- or 16-gauge, 3-inch needle. Price: **50c** each.

BLEEDING NEEDLE HOLDERS

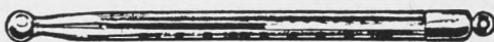
SEVERUS

Price: **\$1.65** each.

IDEAL

A 14- or 16-gauge holder. Price: **\$1.65** each.

Veterinary Thermometers



Certified; 4 inches long; small round bulb for easy insertion and minimum breakage; in hard rubber case.

Price: **\$1.50**.

WIRE CAPSULE FORCEPS



Nickel finish, for use in administering capsules and tablets to swine, sheep, goats, and other small animals.

Price: **40c** each.

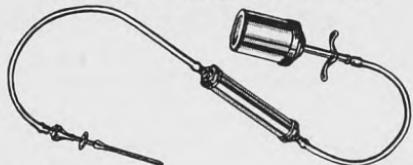
BRITISH CAPSULE FORCEPS



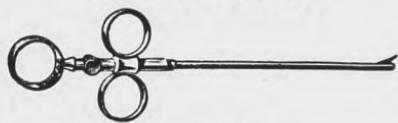
Heavy steel construction, for use in administering capsules and tablets to swine, sheep, goats, and other small animals.

Price: **95c** each.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

MILK FEVER OUTFITS

Long lasting metal pump with soft rubber tube and milking tube. Outfit complete in cardboard carton. Price: **\$4.40.**

TEAT SLITTERS

Three-ring single blade.
Price: **\$3.50.**

BALLING GUNS

Simplifies administering capsules or tablets to horses, cattle, sheep or swine. Capsule or tablet remains in head until dislodged with plunger.

EQUINE SIZE with pistol grip, as illustrated above **\$3.60**

EQUINE SIZE with 3-ring grip **\$4.00**

EQUINE SIZE with pistol grip, extra long plunger, may be used for intortion of uterine capsules **\$4.00**

SHEEP or SWINE SIZE with 3-ring grip:

Medium size head (2½cc.) **\$2.20**

Large size head (5cc.) **\$2.40**

Triple Head, accommodates five sizes of capsules or tablets **\$2.75**

All prices postage extra.

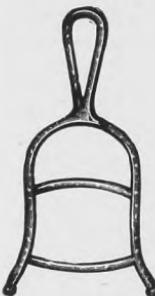
SUPERIOR PIG FORCEPS

Made of refined high strength malleable iron, finished in high grade tin plate.
Price, each, **\$1.95.**

BALLING IRONS**Equine**

Aluminum with handle and loop for head rope.

Price: Each, **\$2.10.**

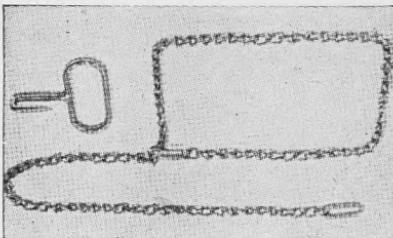


Malleable Iron without handle, price, each, **\$1.35.**

For Hogs and Sheep

Jaw Spreader for use in giving capsules.

Price, each, **90c.**

OBSTETRICAL CHAIN AND HOOK

Chain is of high-quality material and durable for heavy-duty obstetrical use. Nickel finish, facilitates cleansing and sterilizing.

30-inch, **\$1.00.** 60-inch, **\$1.65.**

Hook, nickel finish, is designed to grasp chain firmly either in ring or at any link.
Price: **\$1.50.**

HAND TALLY REGISTER

Tally Register No. 0, 3-dial counts to 999. Size No. 1, 4-dial, counts to 9999. Can be set to zero at will. Used for counting cattle, sheep, ties, telegraph poles, passengers, freight, logs, lumber, etc., and for counting people going in or out of public places. For accurately checking or counting anything.

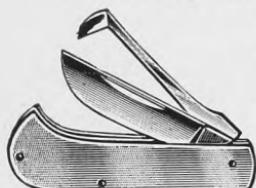
Prices: Size No. 0, 3-dial, **\$6.50;** Size No. 1, 4-dial, **\$7.50.**

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

STOCKMEN'S KNIVES

Size, 3 $\frac{1}{8}$ inches. Carbon steel blades and genuine stag handle.

Boker, 3-blade (no punch) each, **\$3.75.**
In individual plastic case & gift box, ea. **5.50**
Utica, with large clip, spay and punch blade. Price: **\$2.50.**

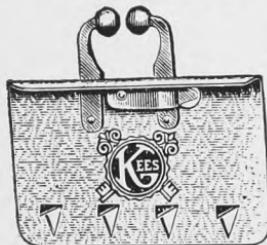
CASTRATING KNIFE

Widely used by stockmen. 2 $\frac{1}{2}$ " long. Has 2 blades of finest knife steel carefully tempered.

One castrating blade 2 inches long and one hook or lance blade the same length. Stainless steel handle. Price: **\$1.50.**

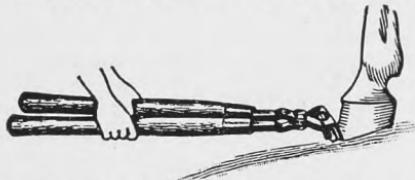
Same as above but with second blade instead of hook, each **\$1.65**

Single blade, finest Sheffield steel castrating, black or nickel handle, each, **\$1.00.**

KEES CALF WEAVER

Stickers may be bent down if not needed. Simple to put on. Just open and snap closed on nostrils.

Price: each — **50c.**

HANDY HOOF TRIMMERS

An ideal tool for every farmer. So simple that a boy can do the work. Use this tool for trimming hoofs on horses, cows and bulls. Using this trimmer prevents accidents, saves time and money. The 30-inch handles give leverage. Made of high carbon tool steel.

Price: **\$8.95.**

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE

UDDER INFUSION TUBES

For use in the injection of medications into the teat canal.

BENT, SCREW TYPE

Bright nickel finish, length 2 $\frac{1}{2}$ " from curve. Has threaded hub which screws into end tablet of standard hypodermic syringe.

Price: **45c** each; **\$4.80** dozen.

STRAIGHT, SLIP TYPE

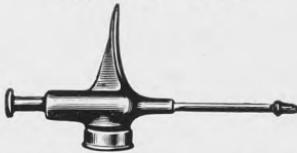
Bright nickel finish, length 2 $\frac{1}{2}$ " from hub. Fits large-size adaptor on standard hypodermic syringe.

Price: **35c** each. Dozen, **\$3.60.**

COW HOBLES

With two flat metal hooks fitting over the tendons or cords of cow's legs. Chain is drawn through slot until brought into holding position. Stops kicking, side-stepping, etc., and is equally useful whether cows are milked by hand or machine.

Each, **80c.** In lots of 6 or more, **80c.**

SQUIRT GUN

Convenient squirt gun. Fits screw top can. Price: **\$1.65.**

GEM ELECTRIC FENCER

Complete, including 6-volt Burgess or Eveready, Hot Shot Batteries, fifty No. 5 Line Knobs, four No. 55 Corner Spools, fifty leather washer, instruction sheet and guaranteed card weight, 20 lbs.

Complete as described **\$18.00**

POULTRY KILLING KNIVES

Beech handle, 3-inch blade, each **85c.**

VETERINARY INJECTION PUMP OUTFIT

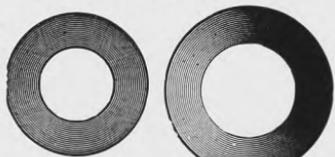


This is a continuous flow pump as it pumps on both the up and down stroke. It can also be used with a stomach tube for drawing fluid out of the stomach by attaching stomach tube to the bottom nipple. It is made of heavy brass seamless tubing, nickel-plated, with one-piece head and tapered tube connection that fits all size stomach tubes.

Price: Pump only, **\$9.00**. This pump with 5 feet of rubber tubing, **\$10.00**. Put up in metal case, **\$12.00**.

Wood nozzle for Injection Pump, each, **\$1.75**.

STOMACH TUBES FLEXIBLE



Actual Size of Tube Thickness

May be used in connection with injection and suction pump.

LARGE

Outside diameter, $\frac{7}{8}$ -inch; inside diameter, $\frac{1}{2}$ -inch; thickness of wall, $\frac{3}{16}$ inch; length, 10 feet. Price, **\$2.80** each.

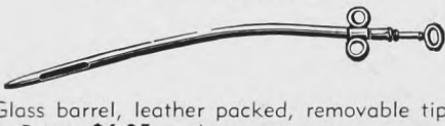
Same size tubing, any length, per foot, **30c.**

SMALL

Outside diameter, $\frac{3}{4}$ -inch; inside diameter, $\frac{3}{8}$ -inch; thickness of wall, $\frac{3}{16}$ inch; length, 10 feet. Price, **\$2.40** each.

Same tubing, any length, per foot, **28c.**

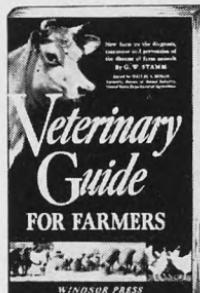
SUTHERLAND STYLE IMPREGNATOR



Glass barrel, leather packed, removable tip. Price: **\$6.35** each.

VETERINARY GUIDE FOR FARMERS

Prepared especially for the farmer by G. W. Stamm, and was edited by Dallas S. Burch, for many years an executive of the U.S. Bureau of Animal Husbandry.



A section of the book is devoted to each of the farm animals such as cattle, hogs, sheep, horses and mules, poultry, etc., and tells what causes the diseases which affect these animals and how to prevent and control these diseases.

Anyone on the farm who can read the regular farm magazines can read and understand Veterinary Guide For Farmers and make use of the practical information it contains. Price, each, **\$4.75**.

SHEEP SHEARS



From England. The famous T.U.S. Hand Sheep Shear or the B.B.A. Shear—Double Bow Pattern.

6 $\frac{1}{2}$ " blade—Straight Edge Trimming Shear, Pair	\$2.75
7" Blade—Pair	3.00

HORSE AND MULE SHEARS



Forged and tempered. Curved blades. Full ground and polished. 10 $\frac{1}{2}$ inches long.

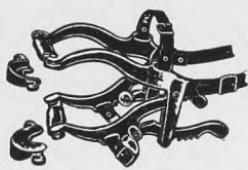
Price: **\$1.75** each.

CURVED BLADE ROACHING SHEARS



Japanned handles. Heavy steel blades curved just right to properly trim tails and rumps or roach a mane. One blade serrated. 7 $\frac{1}{2}$ -inch length. Price, **\$3.50**.

McPHERSON'S MOUTH SPECULUM



Allows for a large opening, without any obstructions, for examination and dental work, and is fitted with two sets of dental plates. One set, covered with rubber cushions, is used when working on the incisors. The semi-lunar cup-shaped plates fit on the incisor teeth and are used when working on the molars. Made of brightly polished alloy, fully guaranteed, fitted with leather straps. Weighs only 2½ pounds. **\$19.50** each.

MOUTH FLOAT



Set consists of handle, one blade, and two detachable heads, one straight, one curved. The blade is fine on one side and coarse on the other.

Price: Mouth Float complete with two heads, file and rasp blade, **\$4.50** each.

Universal file and rasp blade, **70c** each.

CATTLE TROCAR



For relieving bloat in cattle. A high class instrument. Can attach hose for irrigation use.

Price: 5½-inch Cattle Trocar and Canula, metal handle, **\$2.20**. Canula only, **\$1.00**. 5-inch Trocar and Canula, wood handle (also used as a Bull Nose Punch). Price: **\$1.50**. Canula only, **90c**.

METAL DOSE SYRINGE



Three ring 2-ounce dose syringe made of brass, heavily nickelized, equipped with two 6-inch pipes, one heavy, one light, recommended for drenching and for irrigating wounds.

Price: **\$2.25**.

Our 4-ounce special dose syringe is made of heavy brass with special nickel plating. Especially favored for giving sheep drench powder and graduated by ounces. The barrel is short, consequently the plunger is easier to handle. Has a double-way packing to insure effective operation. Furnished with a 6-inch heavy pipe for dosing and a lighter 6-inch pipe for irrigating wounds.

Price: **\$3.00**; 6-oz. size, **\$5.00**; 12-oz. size with 9-inch pipe, **\$9.00**.

BREEDERS BAGS

Pure rubber for stallion or jack.
Price: **\$2.00** each.

MILKING TUBES



Self-retaining, bright nickel finish; indispensable for use with sore and inflamed teats and udders. Available in three lengths, 2-inch, 2½-inch, and 3-inch. State length desired when ordering. Prices: each, **20c**; in lots of a dozen assorted lengths or a dozen of any one length, per dozen, **\$1.65**.

Postage extra.

Adjustable Milking Tube, self-retaining style, bright nickel finish, adjusts to any length from 2 to 4 inches. Each, **30c**. In lots of a dozen or more, per dozen, **\$3.30**. Postage extra.

ABOVE PRICES F.O.B. CALGARY — ADD POSTAGE



FRANKLIN *products*

PROTECT THE STOCKMAN'S PROFIT



FRANKLIN SERUM COMPANY OF CANADA, LTD.

611 First Street, East

Calgary, Alberta, Canada

Cover printed in U. S. A.

